

City of Newark, New Jersey

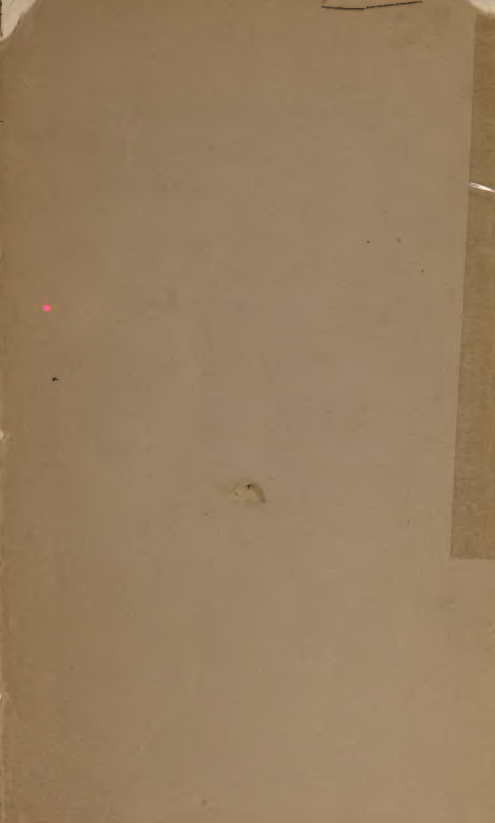
ANNUAL REPORT

OF THE

DEPARTMENT  
OF HEALTH

For the Year Ending December 31, 1919







*WITH THE COMPLIMENTS OF THE*

*DEPARTMENT OF HEALTH*  
*OF NEWARK, N. J.*

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*THIS DEPARTMENT WOULD BE GLAD TO RECEIVE YOUR  
PUBLICATIONS IN RETURN*

*CHARLES V. CRASTER, M. D., D. P. H.*  
*HEALTH OFFICER*



VISITING NURSE STAFF OF THE DEPARTMENT OF HEALTH

# ANNUAL REPORT

OF THE

## Department of Health

[DEPARTMENT OF PUBLIC AFFAIRS]

CITY OF NEWARK, NEW JERSEY



FOR THE YEAR ENDING DECEMBER 31, 1919

THE ESSEX PRESS, PRINTERS  
NEWARK, N. J.









*"To you from failing hands we throw  
The torch. Be yours to lift it high!"*

—JOHN McCRAE.



"The record of deaths only registers, as it were, the wrecks which strew the shore, but it gives no account of the vessels which were tossed in the billows of sickness, strained and maimed by the effects of recurrent storms."—*Lyon Playfair*

TO THE READER:

The Annual Report of the Department for the year is presented as a health picture of an unusual period in the city's history. The year 1919 will be remembered as one of rehabilitation and reconstruction after a great war and a great pandemic of disease. The horizon is now clearing, as the records of disease and death for the city for the past year will show.

CHARLES V. CRASTER, M. D., D. P. H.,

*Health Officer*

March 1, 1920

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## EMPLOYEES OF THE DEPARTMENT OF HEALTH

### EXECUTIVE DIVISION

CHARLES V. CRASTER, M. D.	<i>Health Officer</i>
WILLIAM J. BUEHLER	<i>Bookkeeper</i>
ROBERT F. MORGAN, JR.	<i>Stenographer Clerk</i>
HENRY A. HABIG	<i>Stenographer</i>
MARCELLA DELACEY	<i>Telephone Operator</i>
MALCOLM HUNTER	<i>Multiphase Operator</i>
ELBERT S. BALL	<i>Clerk Vital Statistics</i>
CORA B. NATHAN	<i>Asst. Clerk Vital Statistics</i>
AUGUST W. JARGOSCH	<i>Janitor</i>
JAMES P. MADDEN	<i>Night Custodian</i>
JOSEPH COLLINS	<i>Chauffeur</i>
FRANCIS J. FLYNN	<i>Chauffeur</i>
DAVID D. CHANDLER (Retired)	<i>Health Officer</i>

### SANITARY DIVISION

WILLIAM H. YOUNG	<i>Clerk in Charge</i>
ANDREW J. BRADY	<i>Detailed Inspector</i>
BERNARD J. CAHILL	<i>Detailed Inspector</i>
CHARLES F. CONRAD	<i>Detailed Inspector</i>

#### *Inspectors*

WILLIAM HOPPER	EDWARD A. CLEARY
MORRIS SEIDL	JAMES WHELAN
CHARLES H. BURKE	EDWARD J. FLYNN
ANTONIO PANZERA	CHARLES E. DEVINE
HUBERT O'ROURKE	HOWARD HUFFERT
JOSEPH A. MAGUIRE	ADOLPH O. ELSASSER
CLARENCE J. PALMER	THOMAS P. WALSH
PATRICK J. KEATING	GUSTAVUS E. FRIEDEMANN
JAMES J. WATERS	DANIEL MURPHY
HENRY MACDONALD	JAMES J. MCCARRON
CASPAR BENZ	EDMOND A. RYAN
PATRICK J. BROGAN	EDWARD GAYNOR

CHARLES N. McLAUGHLIN

JOHN P. ROGERS	<i>Stenographer</i>
EDWARD A. SMITH	<i>Stenographer</i>

## DEPARTMENT OF PUBLIC AFFAIRS

## PLUMBING DIVISION

CHARLES A. HALLORING ..... *Chief Inspector**Inspectors*

ANDREW J. MCGOOKIN

JACOB KULL

EDWARD P. COULSTON

JOHN L. WHELAN

PATRICK J. MONAGHAN

## CONTAGIOUS DISEASE DIVISION

DR. E. E. WORL ..... *Superintendent*JOHN J. GREENE ..... *Clerk*

## DISINFECTING DIVISION

THOMAS MULLIGAN..... *Chief Inspector*JENNIE McNALLY ..... *Telephone Clerk*GRACE O'CONNOR ..... *Clerk-Typist*NATHAN ZVAIFLER ..... *Health Physician**Inspectors*

HIRAM R. STEWART

GEORGE A. VAN HOUTEN

RICHARD J. CORBLEY

FRED W. NICHOLS

GEORGE W. GILMORE

THOMAS F. NEWTON

OBADIAH S. COLE

LEO G. DUFFY

IRWIN C. DAKIN

JOHN A. DONOVAN

GARRETT E. ST. JOHN

## FOOD AND DRUG DIVISION

SAMUEL G. SHARWELL ..... *Chief Inspector*HERBERT B. BALDWIN ..... *Chemist*WERNER RUNGE ..... *Veterinarian*JOHN N. WITTPENN ..... *Veterinarian*LEWIS E. BOUTILLIER ..... *Food and Drug Inspector*WILLIAM S. WEBB ..... *Food and Drug Inspector*JOSEPH E. CONNOLLY ..... *Food and Drug Inspector*HENRY F. KNELJER ..... *Milk Inspector*CHESTER L. BENNETT ..... *Milk Inspector*DANIEL KUHN ..... *Meat Inspector*JOHN J. JONES ..... *Sanitary Inspector*ADOLPH E. HOERNIG ..... *Sanitary Inspector*GEORGE E. MANN ..... *Stenographer*CATHERINE E. MAHONEY ..... *Clerk-Typist*

## LABORATORY

DR. R. N. CONNOLLY	<i>Bacteriologist in Charge</i>
THOMAS RIPLEY	<i>Assistant Bacteriologist</i>
H. A. TARRELL	<i>Assistant Bacteriologist</i>
G. WARD DISBROW	<i>Assistant Bacteriologist</i>
H. S. MARTLAND	<i>Pathologist</i>
JOHN F. DUNN	<i>Culture Collector</i>
WILLIAM J. FOYLE	<i>Culture Collector</i>
THOMAS CROGHAN	<i>Typewriter-Copyist</i>
MARY FUREY	<i>Portress</i>

## CITY DISPENSARY

HENRY OLTMAN	<i>Apothecary</i>
ARTHUR F. WARREN	<i>Assistant Apothecary</i>
ANNA M. BRIDGETT	<i>Record Nurse</i>
ALICE I. MICH	<i>Nurse</i>
EDNA B. W. SMITH	<i>Nurse</i>
JAMES CENTANNI	<i>Attendant</i>
JACOB F. SCHAEFFER	<i>Attendant</i>
GRACE E. WEHR	<i>Office Assistant</i>
LEO J. MC MANUS	<i>Dentist</i>
J. E. H. GUTHRIE	<i>Dentist</i>
PHILIP BAYER	<i>Massenur</i>
CLARA M. MACLELLAND	<i>Massenur</i>
ROSE MOORE	<i>Scrubwoman</i>
MARY B. GRANT	<i>Scrubwoman</i>
VAN S. HURLBURT	<i>Janitor</i>

## VENEREAL DISEASE BUREAU

H. J. F. WALLHAUSER, M. D.	<i>Director</i>
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## DISTRICT PHYSICIANS

DR. CHARLES F. HILL	DR. M. J. COFFEY
DR. WATSON F. L. RODEMANN	DR. PAUL H. HOSP
DR. ABRAHAM ROTHSEID	DR. ERNEST KAUFMAN
DR. MEYER JEDEI	

## PAROCHIAL SCHOOL NURSES

ANNA FULTON	JULIA M. MEEHAN
FLORENCE M. MAWER	MARY E. CLINTON
SUZANNA A. SADLER	ANNA LIEBLER

## TUBERCULOSIS DIVISION

M. J. FINE, M. D.	.....	Director
WILLIAM H. GREEN, M. D.	.....	Health Physician
S. B. RAWITZ, M. D.	.....	Health Physician
MARY F. MCGUINNESS	.....	Stenographer and Clerk

*Health Nurses*

CORNELIA WHITEHEAD	HAZEL PADDOCK
MELVINA RYAN	ELEANOR FORNACHON
EVA M. MUIFORD	EMMA L. MUELLER
EMILIE McCORMICK	

*Health Inspectors*

ELIA TILTON	CATHERINE YELLEN
MARTHA I. HUNT	

## IN GOVERNMENT SERVICE

MABEL E. D. HYATT	.....	Red Cross Nurse
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## CHILD HYGIENE DIVISION

JULIUS LEVY, M. D.	.....	Director
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*Health Physicians*

HYMAN SHLAPPIN	HERMAN S. NASH
CHARLES M. ROBBINS	HESSER G. McBRIDE

*Health Nurses*

EVA WAX	ETHEL H. WRIGHT
JEANNETTE GURNEY	MARY A. HORTON
ANNA K. JACOB	AGNES O'NEILL
MABEL M. PHILPOT	EDITH EVANS
BESSIE HALL	MARGARET S. MARTINIS

HELEN C. O'MALLEY

ROSE CONLURSE	Portress
HAZEL L. HARRIS	Secretary
PEARL OSTROW	Typewriter-Copyist
FLORENCE E. FREEMAN	Health Nurse

## MENTAL HYGIENE

DR. C. C. BEING	Director
DR. AMBROSE DOWD	Assistant Director
BEATRICE	Social Worker
W. S. MCGUINNESS	Clerk



ANNUAL REPORT

OF THE

Health Officer



# ANNUAL REPORT

OF THE

## Health Officer

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*To His Honor, Charles P. Gillen, Mayor, Director of Public Affairs.*

DEAR SIR —I have the honor to submit to you the report of the activities of the Department of Health for the year 1919.

It is a pleasure to report that in direct contrast to the year 1918, a year of unusual prevalence of disease and death, the record for 1919 will be remarkable for the city. In no previous year in our history was there so low a prevalence of disease in our community.

It has been a common observation in previous years that low mortality may follow upon the abatement of any extensive epidemic. In 1919, so closely following upon the influenza visitation of 1918, it was, however, generally expected that acute and chronic respiratory infections would have materially increased the rate of sickness. It was also expected that influenza would have produced a greatly increased tuberculosis rate for 1919. This, however, was true only to a certain extent, the spectacular feature of the health record for this year being the remarkable decrease in deaths from acute respiratory infections, as well as from the majority of the common epidemic diseases, as compared with not only the previous, but with the preceding years.

### PROBLEMS OF LIVING.

There is still a pressing need for houses in the city. The years of the world war brought about an influx of new resi-

dents unprecedented in our city. As the various war-time factories closed down many thousands of workmen and women had to find work in other places. There yet remains a considerable number of citizens who are compelled to live on a very small income. The Department of Public Affairs is now endeavoring to secure a more liberal allowance for the needs of one household.

#### THE ICE SHORTAGE

The unusually mild winter of 1918-1919 brought about a marked shortage in the supply of natural ice. As the hot weather demand increased fabulous prices were asked in many parts of the city. Only by means of an agreement come to with the Mayor and the retail ice dealers could the price be held down to a standard of eighty cents per hundred pounds for family supplies. Violators of this agreement were warned that their licenses to sell ice would be revoked by the Department if such practices were continued. A plentiful supply of ice is vitally necessary for the proper keeping of children's food. Any increase in the retail price will naturally react in the lessening use of ice in the family, with the result of subsequent soured milk and bad food. At the various ice depots throughout the city ice could, however, be bought for thirty or forty cents a hundred pounds throughout the summer. The supply of ice for this purpose was not by any means adequate to meet the great demand of last summer. The municipal sale of ice and the establishing of more ice depots in the city promises at least one way of meeting the steadily mounting cost in the handling and distributing of retail ice to the homes.

#### THE CITY POPULATION.

This being the last of the intercensal years, any estimate of our population must of necessity be extremely hazardous. At no time in Newark's history has there been so unusual a growth in our industries as took place during the first three years of the great war. On account of the difficulty in hous-

ing the increased number of our workers many have found homes in surrounding municipalities. Since the termination of the war in November, 1918, many war industries have closed down, thousands of workmen have left for other fields and our present population is a speculation only. There can be little doubt, however, that the new census will show an expansion at least equal if not in excess of the population figures arrived at through the usual calculation by the arithmetical method. Had the census been taken during the war, the city population would have hovered around the half million mark. At this time, the estimated population used for our calculations during 1919, of 440,000, will probably be found to be very near the actual number disclosed by the census returns.

Another factor, the dearth of alien labor, will also contribute to a considerable change in the makeup of our population. The present migration of colored workers from the South still goes on and there would appear to be every sign of its continuance. The colored colonies bring us face to face with peculiar problems of color and custom which demand the best efforts for their solution. The colored laborer, male or female, is, however, extremely receptive of knowledge and advice, and very quickly shoulders the responsibilities of the strange northern life, with its demands upon personal and public hygiene.

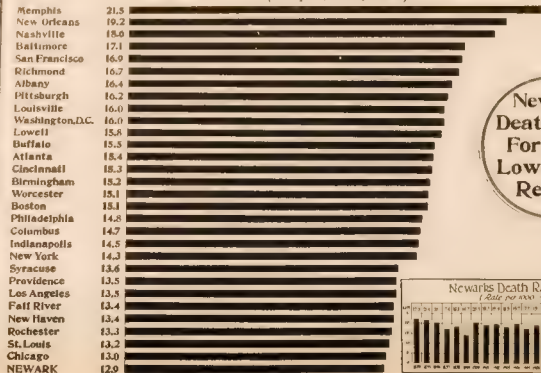
#### THE MORTALITY RATE.

The mortality rate for the city in 1919 is the lowest in our history. The deaths from all causes numbered 5,534, making a death rate of 12.57 per thousand upon an estimated population of 440,000. The rate for 1918 was 19.7 per thousand. This represents an actual saving of 3,080 lives in this year, being the number of deaths which would have occurred had the 1918 rate been continued into 1919. There were 2,873 male and 2,661 female deaths. There were 401 deaths among colored people. It is significant that 147 of the latter

# Annual Death Rates For 1919 In Cities Over 100,000 Population

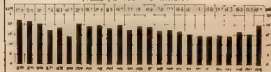
(Tabulation By The U.S. Bureau Of The Census, Based Upon Estimated Population July 1st, 1918.)

(Rate per 1,000 Population)



**Newark's  
Death Rate  
For 1919  
Lowest On  
Record**

Newark's Death Rate 1894 - 1918  
(Rate per 1,000 Population)



were due to pneumonia and tuberculosis. The average death rate for the ten-year period 1909-1918 was 15.9 per thousand. The following are the crude death rates for the city since 1894.

CRUDE DEATH RATES FOR NEWARK—ACCORDING TO CENSUS  
AND INTERCENSAL ESTIMATED INCREASES.

YEAR	POPULATION.	NO. OF DEATHS.	DEATH RATE.
1894	203,923	4,543	22.28
1895	215,725	4,615	21.37
1896	225,000	4,716	20.96
1897	230,000	4,010	17.43
1898	235,000	4,303	18.30
1899	244,000	3,537	18.90
1900	246,070	5,006	20.34
1901	250,000	4,806	19.22
1902	255,000	4,943	19.38
1903	260,000	4,923	18.50
1904	272,000	5,378	19.77
1905	283,737	5,025	17.74
1906	290,000	5,551	19.14
1907	300,000	5,724	19.08
1908	305,000	5,207	17.07
1909	311,000	5,529	17.77
1910	347,469	5,784	16.64
1911	352,000	5,337	15.16
1912	370,000	5,423	14.65
1913	380,000	5,562	14.63
1914	395,000	5,809	14.70
1915	375,000	5,382	14.30
1916	385,000	6,357	16.50
1917	405,000	6,205	15.30
1918	430,000	8,483	19.72
1919	440,000	5,534	12.57

The following table gives the general death rates, together with morbidity and mortality from nine communicable diseases in forty-three cities over 100,000 population:





## MORTALITY AT AGE PERIODS

Among the 5,534 deaths reported, the age period 45-64 years had 1,376 deaths. Under five years of age the deaths numbered 1,238, in which 862 deaths occurred under one year. The age period 25 to 44 years does not appear to have as many deaths as appeared in 1918, for the reason that influenza did not take so high a toll as in that year. Under one year of age the largest number of deaths was due to congenital debility and malformation, 345 out of a total of 862. It is as well to remember that a great number of such deaths are preventable by efficient prenatal supervision and knowledge of child hygiene. Many deaths under this heading are, however, wrongly named and depend upon actual definite disease entirely apart from congenital influences. Among the 1,238 deaths recorded under five years of age, 295 were due to preventable diarrhoeal diseases, among whom 244 died under one year of age. In the age period 5 to 14 years the high fatality was due to accident, 60 deaths being due to this cause alone. In the age period 15 to 24 years and from 25 to 44 years the highest mortality was due to tuberculosis of the lungs. In the age period 45 to 64 years most deaths were due to Bright's disease and nephritis, followed closely by deaths due to malignant disease.

## MORTALITY FROM INFLUENZA.

The deaths from influenza alone in 1919 numbered 267. By far the greater number of these 131 were between the ages 25 to 44 years. In the previous year, 1918, there were 1,387 deaths, with a similar distinction under age periods. The mortality from influenza was principally in the first three months of the year, being the wind-up of the epidemic of 1918. The deaths from pneumonia are always influenced by the prevalence of epidemics of respiratory diseases, such as influenza. The deaths from pneumonia of both types in 1919 numbered 645, of whom 349 were males and 296

# Mortality from Tuberculosis (all forms) in Forty-three American Cities ... 1919 ...

(Rate per 100,000 Population)

Denver	265.2	Providence	122.0
Richmond	239.7	Fall River	120.3
New Orleans	220.3	Pittsburgh	116.9
Baltimore	185.8	Worcester	114.7
Los Angeles	182.2	Jersey City	113.0
Cincinnati	180.9	Kansas City	112.0
San Francisco	180.8	Dayton	109.5
Nashville	175.1	Minneapolis	107.5
Cambridge	171.2	Atlanta	106.1
Philadelphia	163.5	St. Louis	103.9
Toledo	148.9	Oakland	100.7
NEWARK	144.8	Detroit	100.1
Indianapolis	143.7	St. Paul	96.9
Boston	142.5	Rochester	85.4
New York City	141.5	New Haven	84.2
Birmingham	141.1	Milwaukee	83.1
Louisville	139.6	Portland, Oreg.	75.0
Washington, D.C.	137.2	Grand Rapids	62.7
Lowell	132.4	Omaha	56.3
Columbus	131.5	Spokane	56.0
Buffalo	129.1		
Syracuse	127.6		
Chicago	125.7		

While Newark has the twelfth highest Tuberculosis death rate for 1919 out of forty-three American Cities, it is pleasing to note that in previous years Newark's rate was the sixth highest.

**Newark's  
T.B. Death Rate  
For 1919  
Lowest On  
Record**

females. Between 25 and 44 years the deaths from these causes numbered 209, under 5 years, 180, between 45 and 64 years, 101 deaths. The difference in the mortality from influenza and pneumonia during three years is well shown in the following table:

<i>Influenza—</i>	1917.	1918.	1919.
Colored .....	1	50	19
White .....	23	1,337	248
Total .....	24	1,387	267
<i>Pneumonia—</i>			
Colored .....	173	159	78
White .....	590	1,339	567
Total .....	763	1,498	645

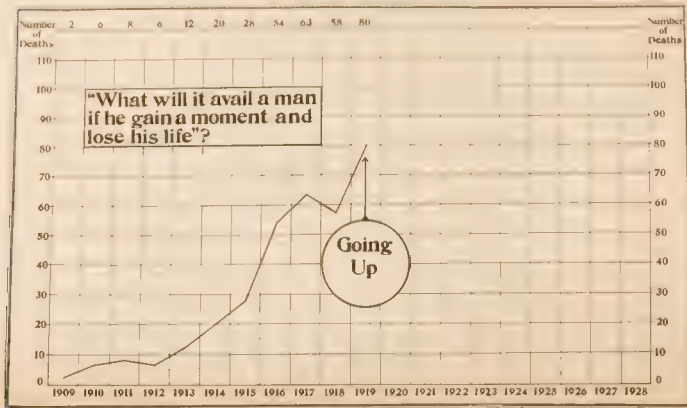
## ACCIDENTS AND HOMICIDES.

The deaths by violence numbered 330 during the year. Of these, 26 were due to homicide, an increase of 6 over the previous year. Deaths due to accident were 304, a decrease of 85 from the number recorded in the previous year. Deaths due to automobile accidents are, however, still increasing in number, 80 being recorded for 1919. The reason for the more frequent deaths from this cause is no doubt due to the increased number of automobiles, as well as to the more general use of the automobile truck for business purposes. There is need for still greater efforts to enforce speed laws and control reckless driving in the city streets. There is no more preventable cause of death than fatalities under this head. The following table shows the fatalities from street accidents during five years:

## FATALITIES IN NEWARK, 1915-1919

	1915.	1916	1917.	1918	1919.
Automobiles	28	54	63	58	80
Street Railroads	8	16	14	20	14
Steam Railroads	17	18	16	30	15
Bicycles and Motorcycles	0	1	1	1	1
Horse drawn Vehicles .....	11	10	2	4	3

# Number of Persons Killed in Automobile Accidents in Newark, N.J.



## COLORED DEATHS

The deaths among the colored were 408, a decrease of 204 from the previous year. The principal causes of death were tuberculosis and pneumonia. Included under this class were also 18 deaths from influenza. The remarkable decrease in colored mortality was in the main due to the fall in deaths from influenza and pneumonia. The mortality from tuberculosis remains about the same as last year. A factor in decreased mortality to be considered is the probable outgoing of colored labor consequent upon the cessation in war activities in the city.

## DEATHS FROM CONTAGIOUS DISEASES.

The outstanding feature of 1919 was the unusually low death rate for the city. A great part of this low rate was due to the decrease in the deaths from contagious diseases. The mortality from epidemic diseases was less under every head with the exception of scarlet fever in which there was an increase of one over 1918. The following table shows a comparison of this mortality with 1918. The most conspicuous decrease is under the head of influenza, 267 deaths, as compared with 1,387 in 1918. Pneumonia deaths were also greatly less, as were also deaths due to measles.

# Mortality from Scarlet Fever

(Rate per 100,000 Population)

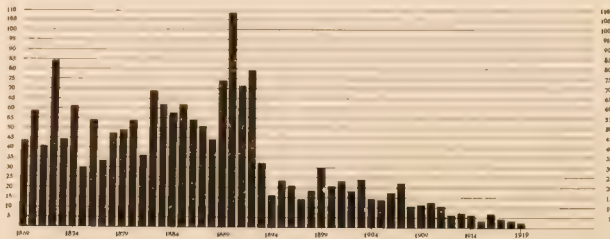


DEATHS FROM SCARLET FEVER, TYPHOID FEVER AND  
DIPHTHERIA PER 100,000 POPULATION, 1894-1919.

YEAR	SCARLET FEVER.	TYPHOID FEVER	DIPHTHERIA.
1894	33.8	16.7	
1895	16.2	23.2	126.1
1896	7.6	20.9	96.9
1897	23.5	14.3	57.1
1898	6.4	17.4	56.6
1899	14.2	25.0	51.7
1900	22.4	20.3	58.1
1901	9.2	22.8	41.9
1902	18.0	18.4	41.2
1903	26.7	23.7	45.1
1904	44.1	14.7	55.1
1905	15.9	14.1	38.8
1906	11.7	17.2	34.1
1907	13.7	23.0	31.7
1908	29.2	11.5	21.6
1909	22.5	12.5	33.8
1910	11.2	12.7	29.9
1911	6.0	10.5	21.0
1912	3.0	7.0	24.6
1913	6.9	7.9	28.9
1914	6.8	6.6	10.4
1915	1.6	2.9	13.1
1916	1.8	6.0	14.8
1917	0.7	4.2	12.3
1918	2.6	3.5	19.1
1919	2.7	2.0	11.3

# Mortality from Typhoid Fever

(Rate per 100,000 Population)





## CONTAGIOUS DISEASE MORTALITY, 1918-1919.

Cause of Death—	1918.	1919
Influenza . . . . .	1,387	267
Measles . . . . .	120	7
Scarlet Fever . . . . .	11	12
Diphtheria . . . . .	82	50
Whooping Cough . . . . .	54	4
Pneumonia—Lobar . . . . .	1,029	432
Pneumonia—Broncho . . . . .	469	213
Typhoid Fever . . . . .	15	9

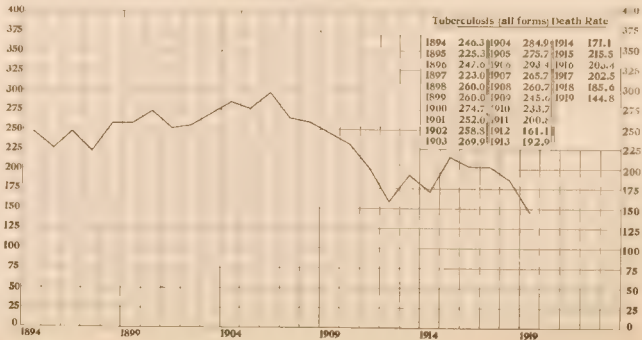
## TUBERCULOSIS MORTALITY.

Following the influenza epidemic of last fall, a visitation high in mortality and disabling complications, it was natural that the records for 1919 were anticipated as certain to show the effects in many of the forms of permanent disability, especially in tuberculosis. The virus of this epidemic appeared to be so consistently partial to location in the lungs that prophecies made in the belief of serious consequences to health as after results of influenza were readily accepted. Such proved to be the case only in so far as tuberculosis prevalence for 1919 was concerned, for although that rate was lower than for 1918, the cases of reported tuberculosis were considerably increased.

The number of deaths from tuberculosis (all forms) was 637, making the death rate per 100,000 population 144.8, the lowest in the history of our records in the city. The decrease in tuberculosis mortality has been continuous in this city for many years and follows upon a low rate for 1918, which was the lowest since 1914. It is probable, however, that a number of persons who would have died from tuberculosis during 1919 succumbed to attacks of influenza. The greater number of deaths, 300, were between 25 and 44 years of age. The male deaths from tuberculosis were 361, and nearly twice as many as the females, which numbered 191.

# Mortality from Tuberculosis, Newark, N.J.

(Rate per 100,000 Population)



TOTAL DEATHS AND DEATH RATES PER THOUSAND,  
AND DEATHS AND DEATH RATES FROM PUL-  
MONARY AND OTHER FORMS OF TUBER-  
CULOSIS SINCE 1900

YEAR	Total Deaths	Total Death Rate per M.	Total Deaths Pulmonary Tuberc.	Death Rate Pulmonary Tuberc.	Total Deaths All Forms Tuberc.	Death Rate All Forms Tuberc. per M.
1900	5,806	20.34	603	2.45	676	2.74
1901	4,846	19.22	581	2.32	630	2.53
1902	4,743	19.33	556	2.19	660	2.59
1903	4,023	18.50	600	2.35	713	2.70
1904	5,378	19.77	651	2.39	776	2.84
1905	5,645	17.74	647	2.28	781	2.75
1906	5,551	19.14	663	2.30	851	2.96
1907	5,774	19.06	685	2.39	797	2.65
1908	5,497	17.97	638	2.06	736	2.60
1909	5,529	17.77	666	1.92	764	2.45
1910	5,784	18.64	680	1.90	812	2.40
1911	5,327	15.16	664	1.66	707	2.01
1912	5,477	14.66	666	1.37	666	1.61
1913	5,562	14.68	631	1.66	763	1.93
1914	5,499	14.70	663	1.47	676	1.71
1915	5,289	14.63	687	1.33	666	2.12
1916	6,367	16.50	685	1.77	763	2.03
1917	6,705	15.30	704	1.74	830	2.02
1918	8,143	19.72	683	1.69	798	1.86
1919	8,434	12.57	562	1.23	637	1.45

DEATHS FROM ALL FORMS OF TUBERCULOSIS, AR-  
RANGED BY MONTHS AND SEX, FOR THE YEAR 1919

MONTH	PULMONARY			OTHER FORMS			Grand Total
	Male	Female	Total	Male	Female	Total	
January	27	22	50	5	3	7	66
February	47	22	69	9	4	13	82
March	43	24	67	7	1	8	75
April	41	12	53	3	3	6	59
May	32	15	47	4	4	8	55
June	29	17	46	6	1	6	52
July	23	16	39	4	4	8	47
August	19	13	32	5	4	9	41
September	15	9	25	3	1	4	29
October	20	11	37	5	0	5	45
November	21	12	33	1	1	2	35
December	27	18	45	3	4	6	51
Total	361	141	502	53	33	85	637

It may be said that in spite of the great decreases recorded in the mortality from tuberculosis in the registration area, the disease must be still prevalent to a degree resembling the widespread epidemics of earlier days. In spite of intimate knowledge, it is evident that our empiric methods have so far failed. Tuberculosis, "hungering like an unloved guest," by its very perversity calls for our utmost efforts for its eradication.

The draft examinations are too recent for us to forget the 82,000 young men who were reported as unfit for national service on account of tuberculosis. The experiments at Frammingham have demonstrated that at least 2 per cent. of an average industrial community would be found at examination to be suffering from tuberculosis in some form or other, and they have left an increasing feeling that we are as yet ill-informed as to the physical standing of communities. In the country at large it is estimated by the National Industrial Conference Board that 1 per cent. of the total population is tuberculous.

In looking at these enormous figures it is evident that the control of tuberculosis is still far from what it should be in the present state of our knowledge. Tuberculosis has been regarded as a disease that is the result of hereditary infections, and then again as a disease of a contagious and communicable nature; nevertheless there has been no decided decrease in the mortality figures. If tuberculosis were a communicable disease whose clinical symptoms were easily discoverable, the problem of control would be simple. It is more than this, however, for like the venereal disease it presents the two-fold aspect of a communicable disease and a social problem so important as to require a complete readjustment of our views on the subject.

There is a factor in its persistence that has somehow escaped our notice. It may well be that this is the neglect of the social side, and that it is responsible for our failure

to bring about good results that are more permanent in tuberculosis control. Support of this view is found in the acknowledged experience that the onset of the disease is largely dependent on unusual habits and manners of living which subsequently react in physical susceptibility. Probably too much emphasis has been placed on the contagious disease aspect and too little on the predisposing causes. The social factors are also strong in determining the opportunity for early advice and treatment. Society makes as yet no provision for sick pay, either for the patient or for the dependent family.

Tuberculosis will not persist when communities live right; when fresh air is regarded as a vital necessity, and when methods of living depart least from accepted standards of health. On the other hand, in this country there may be certain natural and climatic conditions which bring about a susceptibility to tuberculosis. Our severe winters are probably responsible in part for the depressing influence of overcrowded dwellings. The craze for up to date bathrooms and plumbing may well have brought about the greater danger of the common wash basin. The old-fashioned ewer and basin in each bedroom, although inconvenient, certainly provided the more sanitary equipment for the home.

In Kocor's original monograph he drew particular attention to the low tuberculosis mortality experienced in those European countries where hospital beds were provided in large numbers for tuberculosis sufferers. A similar experience has been noted in this country. Bonney says: "The evidence thus far presented is quite overwhelming to the effect that the closed institutions are everywhere responsible for a material diminution in the tuberculosis mortality rate among the neighboring inhabitants." Among the important efforts against tuberculosis is a campaign for an adequate number of sanatorium beds. Some beds should also be provided in local hospitals for emergency bedridden patients waiting for admission to the county institution.

Boards of trepholders will seldom act to provide increased accommodations unless a popular demand for them is made very clear, backed by the opinion of the local boards of health. Such a campaign is necessary in every county in this State. That the present accommodation throughout New Jersey is inadequate is evident. More than half the counties of the State have no sanatorium at all for tuberculosis patients, and in only one, Union County, does the accommodation equal the minimum of one bed for each death from tuberculosis.

Before, however, sanatoriums can accomplish their function of healing every class of the community, a considerable change must take place in the attitude of the tuberculosis sufferers toward these institutions. The tuberculosis sanatorium is commonly regarded as the final step before death, or, instead of, as it should be, the first step toward recovery. For this public view the representative tuberculosis institutions are not to blame. The sanatorium must admit every suitable patient for treatment. It is no one's fault that patients have been largely recruited from the riffraff of the saloon, and the down and outs of the lodging houses, who are generally as hopeless in prognosis as they are in the finer feelings of respectability. It is unfortunate that public opinion has been allowed to look on our sanatoriums as institutions for incurables instead of places for recuperation and recovery.

It is desirable that institutional traditions in tuberculosis sanatoriums be reduced to a minimum. Freedom and home-like surroundings are synonymous; all that is needed is to cure temperamentally as well as physically. It is only in this manner that the person in the early stages of tuberculosis can be persuaded to take hospital treatment. As an indication of what should not be done, only recently a visitor to a well known sanatorium, before being admitted to the ward, was required to be swathed in a white robe, cap and respi-

rator. What an unforgettable vision he must have been to the highly neurotic tuberculosis sufferer.

It is satisfactory to relate that the Essex County Board of Freeholders has undertaken at the Verona Sanatorium a wide and comprehensive building plan for the enlargement of that institution. It is to be hoped that there will be provided there abundant accommodation for children of all ages suffering from actual tuberculosis, as well as some provision made for a preventorium for children of lowered vitality who have been exposed to the disease.

What shall be done to relieve the poverty in tuberculosis is a question always demanding and receiving no satisfactory answer. Food, clothing and money for rent are constantly asked for, or at least obviously needed. These patients should not be poor and applicants for alms. Their poverty is due not to vicious habits, intemperance or crime, but to the effects of a disease which they surely would have been protected against if society had been properly organized.

The tuberculosis victims can surely deny the protection of the community, not in dollars of charity but as sick pay, rightfully earned by labor for the community. How such a scheme of assistance should be carried out is still a matter of conjecture. Many authorities are in favor of state or national health insurance. Whatever objections may be brought against such a scheme, its advantages in tuberculosis are obvious and incontestable. This year a bill was presented to the New Jersey Legislature for the relief of tuberculous families, allowing each dependent adult \$8 a week and each child under 14 years of age \$4. This pension was not to be distributed through municipal poor and alms departments, but by the State Department of Health. The bill was not put in the appropriation bill, and will be redrafted and presented next year. Special legislation for relief covering tuberculosis alone is a logical procedure until a scheme for insurance against all disease hazards is adopted.

## ECONOMIC IMPROVEMENT.

*Importance.*—It is because the problems of economic improvement are spectacular that the public has learned to attach much importance to them. The economic side appears more rational in character and has a wider appeal than any other view. The housing situation is the same in most cities that have a tenement or slum population.

The poor and destitute always gravitate toward the cheap tenements. The cheap tenement is badly kept up, is persistently insanitary and escapes the control of tenement house commissions and local boards of health by constant change of ownership. Dark, damp, ill ventilated rooms are tolerated because they are cheap, and the tenants, fearful of eviction, will not complain. Few boards of health have a staff sufficiently large to inspect continually the conditions in all the tenements within the municipal area. Such buildings may be sanitary one day and indescribably foul the next. The only logical method of control is to pick out the plague spots and center intensive sanitary work on them. A list of tenement houses of a suspicious nature is most useful for local boards of health to have on record. The tenement house commission of New Jersey has adopted a score card for tenement houses which shows at a glance the structural condition of any one tenement building. These score cards will be available to local boards of health and will be a valuable index of housing conditions in these tenements, pointing out the worst places for intensive health work.

## INFANT MORTALITY RATE.

The deaths under one year of age numbered 862, as compared with 1,215 the previous year. The infant mortality rate for 1919 was 71.2 per thousand births and is the lowest recorded for the city. It is a decrease of 28.5 points from the 1918 rate, which was 104.7. As in the case of the general death rate, the low infant mortality for the year was



undoubtedly due in large measure to the freedom from epidemic disease. The following table shows the deaths under one year during 1918 and 1919:

Cause—	1918.	1919
Measles	33	2
Influenza	52	15
Pneumonia—Lobar	57	22
Pneumonia—Broncho	98	65
Bronchitis	84	42
Diarrhoea	269	244
Congenital Debility	442	345

#### THE BIRTH RATE.

There were 11,315 births in the city during 1919, making a birth rate of 25.7 per thousand population. The rate in 1918 was 27.0 per thousand. The male births numbered 5,737 and the female 5,578. There were 499 colored births and 554 births recorded among non-residents. The illegitimate births numbered 137.

#### CLASSIFICATION OF BIRTHS IN 1919

		Rate per 1,000
Males	5,737	13.0
Females	5,578	12.7
Total	11,315	25.7
White	10,814	24.5
Colored	499	1.2
Yellow	1	
Red	1	
Illegitimate	137	0.3
Still births	487	1.1

The average birth rate for the five year period 1915-1919 was 28.14 per 1,000. The rate for 1919 was therefore considerably below the average for five years. There has been observed in Newark, as in other parts of the country, a considerable fall in the birth rate in recent years. The reasons for this are probably various and depend upon genetic and economic factors which are as yet improperly understood.

It is known, however, that in Newark the birth rate was considerably enhanced by the immigration of young married, foreign-born persons and of young people of marriageable age who, having found steady work in the city upon arrival, sent for their wives from abroad or else who married here.

The cessation of this immigration will no doubt cut farther into our birth statistics as time goes on. The present lack of housing and the high rents will result also in sending many young married people to seek homes within commuting distance of the city. There still remains the definite fact that American families are not large, being limited in most instances to one or two children.

#### EPIDEMIC DISEASES IN 1919

In spite of the prevalence of influenza and pneumonia in the early spring months, there has been no year in the history of the city which can compare with 1919 in freedom from epidemic diseases, as well as in the lessened fatality from these causes. Among the fifteen principal epidemic and communicable diseases there was a lessened prevalence in nine and a lessened fatality in fourteen as compared with the previous year. Of the 4,203 cases of influenza reported during the year, all but 155 were in the first four months of the year. The wind-up of the epidemic of Spanish influenza was carried up to the early spring months and was responsible for 265 deaths. As an accompaniment of this epidemic, pneumonia of both types was unduly prevalent. For the first six months of the year the figures for influenza and pneumonia were as follows, compared with a similar period of 1918:

#### INFLUENZA AND PNEUMONIA PREVALENCE AND MORTALITY FOR FIRST SIX MONTHS OF 1918-1919.

	1918		1919	
	Cases	Deaths	Cases	Deaths
Influenza . . . . .	0	21	4,048	265
Pneumonia Lobar . . . .	1,764	1,416	1,205	342
Pneumonia Broncho . . . .	866	184	924	157

The following diseases showed decreased prevalence as well as decreased mortality for the year 1919 as compared with 1918:

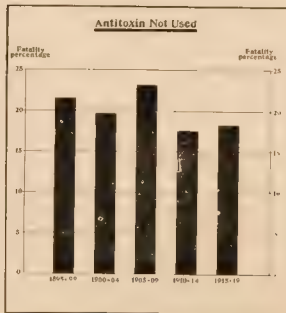
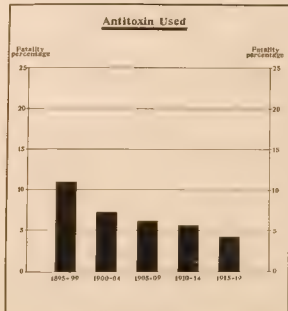
	1918		1919	
	Cases	Deaths	Cases	Deaths
Measles .....	7,779	120	661	7
Whooping Cough .....	2,139	54	642	4
Mumps .....	1,825	0	306	0
German Measles .....	474	0	126	0
Epidemic Meningitis .....	102	45	42	22
Infantile Paralysis .....	8	6	8	2
Lobar Pneumonia .....	1,764	1,029	1,662	432
Influenza .....	29,704	1,387	4,203	267
Typhoid Fever .....	98	15	72	9

#### THE PROBLEM OF PNEUMONIA.

The records of all health departments show very clearly the increased prevalence and fatality from pneumonia. In seasons when epidemics are prevalent such as was the case with influenza during the winters of 1918 and 1919, the deaths from pneumonia are vastly increased. Apart from such variation, however, there is a rising tide of sickness and death due to this disease. The economic loss due to disability alone from this cause must reach an enormous total for the whole country. In 1918, 17 per cent of all deaths were due to pneumonia alone in the City of Newark. In 1919, 645 persons died from pneumonia. If we investigate the age period at death, it is seen that nearly a third of this mortality (209) was in the age period of from 25 to 44 years, while 186 deaths were under five years of age. It may be said that although broncho pneumonia is usually a complication of the epidemic diseases of childhood, pneumonia may be looked upon as a truly preventable disease. A great number of the pneumonia cases developed during winter months follow upon a simple cold, brought about by unnecessary or thoughtless exposure to low temperature. The experience of the army with pneumonia vaccines has

# Mortality from Diphtheria, Newark, N.J. 1895-1919

## CASE MORTALITY WHERE ANTITOXIN WAS USED AND NOT USED



opened up a new vista, not only with regard to the treatment of pneumonia, but principally in its prevention. Pneumonia has been too long looked upon as a necessary evil of civilized communities, against whose annual toll we must sit with folded hands. A preventive vaccine is available, which, although somewhat transient in its protection, may, if applied scientifically, undoubtedly cut down our annual deaths from this cause. The preventive vaccine against pneumonia should have an increasingly popular appeal, especially for persons within the age period of 25 to 44 years.

Scarlet fever and diphtheria prevalence was somewhat increased during the year, but the fatality rate for diphtheria was considerably less than in 1918 (50 deaths to 82). The increased prevalence began in the early months of the year. In January there were 154 reported cases of diphtheria, as compared with 81 in January, 1918. It was, however, a fact that diphtheria was unusually prevalent all over the country last winter, probably having some relationship with the nationwide spread of influenza. The nature of this diphtheria infection was, however, in our experience, unusually mild, for the mortality from the disease for the period was less than that for 1918, in spite of nearly double the prevalence.



## DIPHThERIA ITS MORE EFFEC TIVE CONTROL

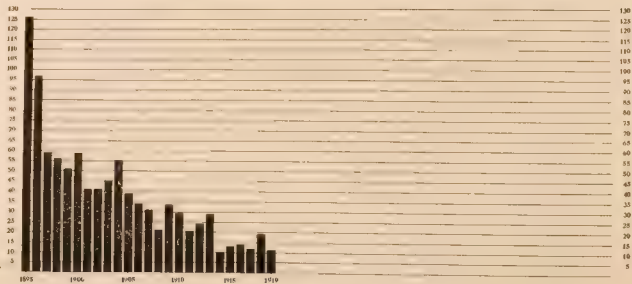
Diphtheria is present in most cities all the year around. There are, however, certain months which, apparently favor the spread of infection. In Newark the recorded cases every year have risen in October and have continued variably from month to month till early summer. Diphtheria has been unusually prevalent during October and November this year, and indeed more cases were recorded in Newark in these months than for the corresponding months for five years previously. Last winter there was also observed undue prevalence of diphtheria not only in New Jersey but in the Eastern States generally. The present cases may well be a "carry over" from the preceding winter. It has been shown that when diphtheria is prevalent in a community it is accompanied by an increased number of "carriers" among the general population, the acute cases representing the reaction of susceptible individuals to a commonly spread virus.

	1915.	1916	1917.	1918.	1919
January . . . . .	146	138	79	81	128
February . . . . .	138	88	81	112	169
March . . . . .	160	70	84	95	148
April . . . . .	90	85	70	112	172
May . . . . .	83	103	77	63	149
June . . . . .	51	73	73	57	126
July . . . . .	58	60	44	65	90
August . . . . .	51	38	35	48	64
September . . . . .	71	24	59	84	72
October . . . . .	90	63	103	87	121
November . . . . .	112	105	108	76	182
December . . . . .	160	76	57	94	137
Total.....	1,210	923	870	974	1,565

The majority of the cases reported in Newark have been among children of the school and pre school period, so that the inference was that infection might possibly be by means of infected children in families and in schools who were not really sick of the disease.

# Mortality from Diphtheria

(Rate per 100,000 Population)





The routine policy of the Department has been where a case of diphtheria occurred in a school to require that cultures be taken from all other scholars in the class from which the patient came. Where the classes were large it was not always possible to carry out this routine work. The necessity for this procedure, however, is suggested by the laboratory records of the Department. Among 4,090 diphtheria cultures taken from school children who were in contact with diphtheria cases during the last few months, twenty-seven diphtheria carriers were found.

This percentage of carrier cases among school children, however, is not high, and would indicate that there are probably other sources than contact at school which are responsible for the present unusual number of cases. The onset of cold weather usually brings on epidemic bronchitis and many cases of sore throat. Mild diphtheria may well be mistaken for tonsillitis and only when a child in the family develops typical symptoms of diphtheria, do we suspect the nature of the sore throat which has been passed from one member of the family to another. All throat conditions in children are suspect for diphtheria at all times. In this relation diphtheria has a peculiar preference for certain age periods.

If reference be made to the Newark Health Bulletin, No. 26, Vol. 2, March, 1919, "The Influence of Age in Epidemic Diseases," it will be found to be 40 per cent. of all cases under five years of age, and over 80 per cent. under ten years. The mortality at these age periods is also significant, 70 per cent. of all deaths from diphtheria in 1917 being under five years of age. If we would, therefore, limit the mortality from diphtheria unusual efforts should be directed to the age period under five years. There is a very definite immunity to diphtheria at birth which is rapidly lost as age advances. Of the one-year periods under five years the greatest mortality was under three years, 54 per cent. of all deaths from diphtheria. The greatest susceptibility to diph-

theria was shown by Dr. W. H. Park to be 70 per cent in all children between one and two years of age.

#### THE SCHICK TEST FOR SUSCEPTIBILITY.

The accepted procedure in case of diphtheria occurring in a large family or in institutions where children may be exposed to infection is to immunize by means of a varying dosage of diphtheria antitoxin as a prophylactic measure.

The Schick reaction, or, if, as, however, it is aptly put out the child which lacks the natural protection which exists in many individuals. Schick determined that when minute quantities of diphtheria toxin were injected into the skin, a natural antitoxin was absent a local reaction shown by a localized redness resulted. According to Schick, a positive reaction shows that there is less than one-thirtieth of a unit of antitoxin in one cubic centimeter of blood serum, and in this case susceptibility to diphtheria is present.

The Schick test is easily carried out and there may result considerable saving of antitoxin where a general immunizing of a large number of children is contemplated.

#### ANTITOXIN

In the treatment of diphtheria or suspected diphtheria it is unnecessary to emphasize the vital necessity of giving antitoxin early and in sufficiently large doses to act quickly. Where the physician's sum of effort at the last moments the intravenous method offers a quick route for meeting the toxin circulating in the blood. The life saving properties of diphtheria antitoxin let in direct relation to the earliness of its administration to the patient.

A comparison of the recoveries from diphtheria among children in Newark who were treated with antitoxin and those untreated is an object lesson of value.

I may say that with regard to the table shown here that all cases of diphtheria in Newark where antitoxin had been given investigated by the Department showed overwhelmingly that the antitoxin had in most cases been administered

at the last gasp, too late to save the patient, or in such small doses as to have been insufficient to save life. The immunity conferred by antitoxin does not, however, last over three or four weeks. A more permanent form of immunizing has been advocated by Park and Zingher, J. A. M. A., December 15, 1919 - New York Weekly Health Bulletin, March 15, 1919, by the use of a toxin antitoxin mixture. Park states that during three years four thousand individuals shown to be liable to diphtheria by the Schick Reaction Test were immunized by a toxin antitoxin mixture, among whom not a single case of diphtheria subsequently developed. Park states that the procedure is absolutely harmless and that one injection gives immunity to 80 per cent. of susceptibles, and that the immunity lasts for a period of at least three years and probably longer. The dose of this mixture is one cubic centimeter injected subcutaneously into the arm at the insertion of the deltoid and the local reaction is generally insignificant. Such an immunity production might well be used to tide children over the susceptible age period under five years. As a routine procedure the use of diphtheria antitoxin by the physician, however, should be unstinted. There is need, though, that all physicians take cultures from patients where clinical symptoms suggest the presence of diphtheria and when the patient is given a precautionary dose of antitoxin. In many cases this is not done, with the result that mild cases of diphtheria remain undiagnosed, with possible danger to the family and the public.

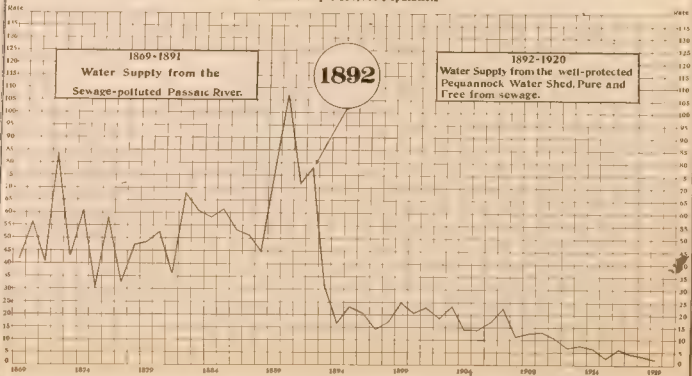
There was an increase of one death in scarlet fever. The increased prevalence with a low mortality from these diseases shows an infection of low virulence.

There was an increase in the prevalence of chickenpox and erysipelas during the first six months of the year, with no fatal cases. The increased prevalence of bronchopneumonia was associated with influenza and was responsible for 213 deaths from this cause. The following table shows

# Newark's Water Supply Greatly Reduces Typhoid Fever Menace

## Remarkable Decrease in the Last Few Years

(Death Rate per 100,000 Population)



the increased prevalence of epidemic and communicable diseases during 1919 over 1918:

Diseases—	1918		1919	
	Cases	Deaths	Cases	Deaths
Scarlet fever . . . . .	515	11	820	12
Diphtheria . . . . .	974	82	1,565	50
Chickenpox . . . . .	807	0	1,507	0
Broncho pneumonia . . . . .	866	469	1,227	213
Erysipelas . . . . .	158	0	205	0
Tuberculosis . . . . .	1,088	798	1,899	637

#### TYPHOID FEVER.

The city was remarkably free from typhoid fever during 1919, there being 72 cases reported and nine deaths recorded during the year. This makes a typhoid death rate of 2 per 100,000 of the population and constitutes a record in our annals. A close follow up of all reported cases to ascertain the point of infection is carried out in all instances. It is satisfactory to record that the majority of cases reported during the year the infection was traced to outside sources, principally during the vacation period. This bears out observation in former years along the same lines. In no instance could infection be traced to the water supply or to the food bought within the city.

SCARLET FEVER, DIPHTEHRIA AND TYPHOID FEVER  
SINCE 1895.

YEAR	DIPHTEHRIA CASES	SCARLET FEVER CASES	TYPHOID FEVER CASES
1895	1,321	623	149
1896	1,261	537	106
1897	999	1,358	103
1898	1,019	478	179
1899	1,170	607	515
1900	1,417	708	320
1901	1,154	643	316
1902	985	557	259
1903	1,150	779	306
1904	1,083	1,649	210
1905	1,014	1,309	228
1906	1,273	616	336
1907	1,039	773	330
1908	800	1,500	181
1909	1,333	1,786	210
1910	1,585	1,664	178
1911	1,330	1,027	200
1912	1,068	698	193
1913	1,514	1,036	217
1914	1,490	1,696	250
1915	1,210	618	108
1916	823	885	126
1917	870	669	111
1918	974	515	87
1919	1,564	820	72

## MENTAL HYGIENE BUREAU.

- The municipality, long recognized as the proper authority to handle the problem of insanity, has a new outlook—the prevention of mental diseases. Observation and research of late years have shown that prompt, early advice and treatment can be given many cases of insanity can be prevented and even cured.

A basis for a bureau of mental hygiene has existed since 1907 when the Department of Health inaugurated Dispensary clinics for the treatment of nervous and mental diseases. Provision was also made in the City Hospital for these cases.

in special observation psychiatric wards. In 1919 a Bureau of Mental Hygiene was established in the Department, with a staff made up of a director, an assistant physician, a clinic physician, one trained female psychiatric social worker and a stenographer.

Much valuable work has been done by this bureau in the past year in adjusting and advising difficult mental cases. The problem to be attacked is tremendous and with the force at our disposal only a small fraction of the real work can be attempted. Through the generosity of the director of the National Mental Hygiene Association, the salary of the trained psychiatric social worker and the salary of a psychiatric physician were paid for one year. The psychiatric physician examined all the children at the Parental Home and the Home of Detention in this city and the results have been so valuable as to indicate the need for the Department to carry on this work as part of its preventive health activity. The work of the bureau shows that a Department of Health is the logical center for all activities pertaining to the control of insanity in the community. Much public education is necessary, as well as publicity upon the facts of prevention of insanity as a definite part of any public health program.

#### DRUG ADDICTION

The drug addict problem has not assumed large proportions in this city. There can be no doubt of the existence of a number of drug addicts, but the increasing difficulty in obtaining "dope" must steadily decrease their numbers.

In this respect, an important decision of the United States Supreme Court in the cases of the United States of America versus C. T. Doremus, W. S. Webb and Jacob Goldbaum, contained in a circular (C. D. 2809) published by the Commissioner of Internal Revenue, very clearly points out the duty of the physician.

"An order issued by a practicing and registered physician for morphine to an habitual user thereof, the order not being issued by him in the course of professional treatment in the attempted cure of the habit, but being issued for the purpose of providing the user with the proper state of mind to keep him comfortable by maintaining his customary use, is not a physician's prescription within exception (a) of Section 2 of said Act."

Whether or not the sedation treatment is the proper way of treating drug addicts is still a disputed point. Physicians who are unfamiliar with the specialized treatment for drug addicts cannot be too careful in guarding against a too literal interpretation of the Harrison Act.

The proper place for the drug addict is in the hospital ward or under special supervision in a sanatorium.

The conflict of the drug addict by the practicing physician is invariably so lax as to encourage the illegal use of narcotics and cannot but be a hazard to physician and patient.

No physician should treat drug addicts without a full knowledge of how far his action is controlled by the law and without knowing whether his activities on behalf of the addict are being abused by the patient and his friends.

Drug addicts are being handled by the Bureau of Mental Hygiene, who report the voluntary treatment of many of such cases in the County Sanatorium for the Insane.

#### A SUMMARY OF 1919.

The year 1919 was passed into history as a period of rehabilitation following the greatest calamity in our annals. The sudden cessation of war in 1918, the removal of war restrictions upon production and the return of the National Army from France marked a epoch in the nation's history which will influence greatly the future of our people. The return



to a peace footing has brought with it economic problems which have very definitely added hardships to the average household.

The high cost of the necessities of life, especially that of rent and clothing, has resulted in demands for wage increases far beyond anything known in pre-war times. Where increases in wages have resulted they have in few trades kept pace with the increased price of the staple articles of food and other necessities. It is reasonable to suppose that the results of two years of war would to a certain degree have brought about underfeeding in the children of many families. Indeed, the influenza epidemic of the winter of 1918 and 1919 has been by many authorities ascribed to underfeeding of the population due to wartime restriction in food. This, however, has not been proved and there is at this time little evidence to show that the average American community is visibly less well nourished than formerly.

The reports of school nurses would indicate, however, that the high cost of clothing has reacted in parents being tardy in providing children with sufficient clothing and shoes during the recent winter. The Children's Emergency Relief Committee, in conjunction with the Board of Education, has done much to relieve distress in providing shoes, rubbers and clothing during the winter months while this nation was at war.

Nothing has been more striking during the year passed than the part taken by the municipality in bringing relief to the citizen where scarcity of food or high prices interfered with the proper distribution of food. Through the efforts of his Honor, Mayor Gillen, this city was the first to start the sale of army and navy foods to the people. The result has been the purchase of many articles of food at prices greatly below the retail stores' prices. It cannot be doubted that this city's activity did much to restrain profiteering in foods during the year.

The city control of coal was made necessary by the coal shortage of 1918. The winter of 1918-1919 was so mild that the coal supply was available for the summer of 1919. The coal supply then rose rapidly and only by a threat to revoke the existing ordinance was a standard price of 80 cents per ton and 1 pound retail adopted as a reasonable charge to customers.

In spite, however, of high food costs, the year 1919 was, with the exception of the spring months, particularly free from disease. The general death rate and the deaths from all causes were the lowest in the city records. The infant mortality rate, the typhoid rate, and that from tuberculosis were never so low as in the past year. With regard to tuberculosis, it is to be noted that although the death rate was low, the number of reported cases of the disease was more numerous than the previous year. The explanation for this is probably the epidemic of influenza, which was the chief cause of the going about on a sickly ground for the development of the disease in numbers of susceptible persons in the community. The direct results of the influenza epidemic of 1918-1919 are apparent in our death records for tuberculosis in 1920 and 1921.

The housing situation in Newark remained acute during 1919. The overcrowding was much undesirable, crowding in tenement and apartment buildings. The high rents charged, no longer permitting many persons to seek cheaper accommodation, forced them to seek out cramped quarters. The City of Newark cannot afford to have its workers housed in an unsanitary and insanitary, a weak and comprehensive building program supported by the workers themselves is the only remedy for the present harmful shortage of dwellings in our community.

Respectfully submitted,

CHARLES V. CRASTER, M. D., D. P. H.  
*Health Officer.*

(Reprinted from AMERICAN JOURNAL OF PUBLIC HEALTH, Vol. IX,  
No. 11, November, 1919, pp. 823-826.)

## THE OUTDOOR POOL

### OBVIOUS NEED FOR CLEAN POOLS

CHARLES V. CRASTER, M. D., D. P. H.,  
*Health Officer, Newark, N. J.*

*That almost any bit of water will serve for a wading pool seems to be the idea in practice. Dr Craster has tested such pools and finds that they need to be as well constructed as bathing pools and as well cared for. Chlorination is necessary when they cannot otherwise be controlled.*

Speaking generally, it is impossible to expect the water of swimming or wading pools, natural or artificial, to be clean in the ordinary meaning of the word. The question arises as to the necessity for expecting too great a standard of purity in these places. It is obvious, however, that there must be considerable danger to the health of children where the contents of any pool approaches a high degree of impurity.

In running brooks and some natural pools the current of fresh water is sufficient to keep the contents pure no matter how great the number of patrons. The same cannot, however, be said of natural streams or artificial ponds where the water's flow is so slight as to permit a real condition of over-contamination. Some light upon the conditions existing in city canals and wading pools was secured by an investigation upon the use for wading and swimming by children of a large canal running through a thickly populated district and several wading pools in use in public parks. Although the investigation was carried out in 1917, it represents present canal conditions and like conditions in uncontrolled public wading pools.

The canal in question is located in Newark, receives no sewage whatever from any locality during its whole course but does receive storm water from house roofs and surface drains along its banks. There is an imperceptible current towards an outlet in the Passaic River through various canal locks. This canal is a very popular swimming place for the boys of this city and great difficulty is experienced in preventing its use for this purpose during hot weather. There was no known case of pollution of the water of this canal at the time the investigation was made.

Samples of water were taken during the latter part of June. Four places popular among boys in the city for swimming and wading were selected along the canal banks. Four samples of water taken in sunlight at these places showed the bacterial count to be between 1,400 and 225,000 bacteria per cubic centimeter. Fermenting bacilli were present in all, two samples showed colon bacilli in 1/20 of a cubic centimeter and in 1/10 of a cubic centimeter in another two.

The report of the city bacteriologist is unfavorable to the use of this canal water for bathing purposes, not only on account of the results of the test made, but also because of the great danger of the water receiving serious pollution in passing through the city and suburbs. It may be said in passing that the unclean condition of this canal water was not the result of large contamination, the canal not being used for freight at this time. It would be well nigh impossible to make the water of such a canal fit for bathing purposes. Any open canal is naturally the catch-all of undesirable rubbish. Decomposing animals frequently contaminate its depths and when it passes close to houses its use is altogether too convenient to be resisted as a depository for refuse.

It is safe to assume that the results obtained in the case of the canal could be duplicated in any other canal situated within a city's limits.

The filling up of natural streams and pools by city improvements has brought on an insistent cry for wading pools in public parks.

The resultant development of the artificial wading pool has been commendable. There are, however, more disadvantages than advantages in attempting to provide such facilities without due regard to the dangers of an insufficient supply of water and in the faulty materials used in construction.

It may be asked how is a wading child liable to harm no matter what kind of water is present in the pool. It is well to remember that children are frequently in bathing costume, splashing is part of the game and certainly very intimate contact with the hands and water takes place in playing with floating objects. Children will fall into the water and even put their faces to the surface. This being admitted, there can be no argument against clean water for wading pools, as there is none against that for swimming or bathing purposes. There may indeed be a further argument by reason of the more tender age of the children and their greater susceptibility to infection.

The wading pools investigated were those maintained during the summer in the various public parks. No swimming was allowed in any of them and they were under constant supervision by park attendants during use. In none of these pools had any efforts been made to control the purity of the water, the general scheme of construction being to imitate a natural wading pool in the country. The attendance of children of nearly all ages at these places was high during hot weather and in some instances very young children were found bathing in the water. The conditions found were as follows:

Pool No. 1. Approximately 150 x 100 feet. Depth of water, 18 inches. Construction of pool, sand and gravel. Natural earth grading at sides. Water supply from city



POOL I.

mans. No continuous supply. Pool emptied and cleaned once a week. Fresh water added every day to make up for daily wastage. Average attendance of children at this pool, 500 daily. The pool was in use during the time the samples of water were taken. Water appeared muddy, with a black scum floating on surface in some parts.

Results of samples of water taken:

Sample	Date	Temp. of Water	Time	Bacteria
1	July 30	91.1 F	10:40 a.m.	75 coliforms
2	July 30	91.8 F	5:15 p.m.	100 num. col. to count 100 num. col. to count 100 num. col. to count

The sample taken at the end of the day, N. 2, indicates the progressive contamination of the pool in use. The pool was quite separate from any other body of water and was surrounded by drives and walks.



POOL II.

Pool No. 2 situated in a large public park, surrounded by trees and shrubbery. The size is 350 x 100 feet, the depth of water 20 inches. It is divided off, but is part of a large lake. Banks and floor are of loose sand with gently sloping sides. City water is supplied from a one-inch stand pipe, making a continuous flow of water towards the outlet. The

pool is encased in net a week, scraped once a year and is treated with copper sulphate twice a week to keep down algæ.

The daily attendance of children 1,000 to 1,500—no bathing



POOL III

Samples of water taken from this pool and results are shown as follows:

<i>Sample</i>	<i>Date</i>	<i>Temp. of Water</i>	<i>Time</i>	<i>Bacteria</i>
1	July 30	81° F	11.40 a. m.	Too numerous to count. Fermenting bacilli in 5 cc
2	July 30	90° F	4.55 p. m.	31,000; fermenting bacilli in 1/10 cc
3	Aug. 2	85° F	12.20 p. m.	12,000; fermenting bacilli in 1/20 cc
4	Aug. 2	82° F	2.15 p. m.	12,000; fermenting bacilli in 1/10 cc.

In spite of the continuous supply of water this pool did not appear to be clean, water was muddy and opaque at the time of inspection. The excessive attendance of children overtaxed the diluting power of the incoming supply of fresh water.



Pool No. 3—This pool, by far the largest of the three, has an extent of nearly half an acre. It forms part of a much larger lake which is fed from underground springs. It is partly surrounded by trees and low shrubs and has a natural bed of sand. New sand is added every second year. It is cleaned once a year and the water drawn off once a week. Daily average of children is 1,000 to 2,000. No bathing is allowed. Depth of water is from 16 to 24 inches.

<i>Sample</i>	<i>Date</i>	<i>Temp. of Water</i>	<i>Time</i>	<i>Bacteria</i>
1	July 30	90° F	1.20 p. m.	19,000; no fermenting bacilli
2	July 30	80° F	4.35 p. m.	10,000; fermenting bacilli in 5 cc.
3	Aug. 2	85° F	12.45 p. m.	3,000; fermenting bacilli in 1/2 cc.
4	Aug. 2	85° F	2.40 p. m.	85,000; fermenting bacilli in 1/5 cc.

The bacterial counts of this pool were interesting on account of the large size and the great body of water available for dilution. The contamination here was due to an indifferent flow of current and no means of using the diluting power of the main lake.

In the investigation of the wading pools the contaminations have been shown to be due to the faulty laying out of these places as well as to the absence of a sufficient fresh water supply to dilute subsequent contamination. It is evident that wading pool water can be considerably contaminated irrespective of the fact that it may be part of a large sheet of water. In such places where natural conditions are simulated, a good flow of water would considerably improve the sanitary quality of the water.

The purity of the water of the pools here described was subsequently controlled to a large extent by the use of chlorinated lime. In the subsequent supervision periodic chlorination was advised, with consistent results.

Although any pool or pond might be safely used for wading with proper care, the only logical method pool is one built along similar lines to the public bath house. These should have cement floors, showers, and coping with a good supply of fresh running water. Showers and toilets should be conveniently located, and no wading in shoes and stockings permitted.

#### SUMMARY.

Water in wading pools is usually black to brown and used as bath water.

Water for diluting contents in wading pools is not usually sufficient.

Children frequently go into wading pools after having walked barefooted for miles upon roads.

The close contact between the wading child and the pool water is evident.

Contamination of pool water is brought about by insufficient diluting water and overcrowding of space by patrons.

Wading pools should be constructed of cement and properly equipped as baths.

Chlorination of all wading pools should be a routine proceeding when content contamination cannot be otherwise controlled.

ANNUAL REPORT

OF THE

Division of Sanitation



# ANNUAL REPORT

OF THE

## Division of Sanitation

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*Dr. Charles V. Craster, Health Officer.*

DEAR SIR: I herewith submit the report of the Sanitary Division for the year 1918:

### SANITARY CONDITION OF THE CITY.

It was apparent to the inspectors engaged in the annual clean-up and survey of the congested districts throughout the city that conditions had greatly improved over that of former years. This was due primarily to the mild and open winter and normal garbage collections maintained throughout the year, also to the educational campaign instituted by this Department in former years.

The educational campaign was instituted for the purpose of instructing the householders on the importance of the cleanliness of the home and its surroundings, of the benefits derived from clean and sanitary surroundings, as compared to the disease breeding conditions and hazards to the health of the children and the community brought about by insanitary living rooms, halls, cellars, yards, etc.

The city collection of garbage throughout the year has been satisfactory. It was found that during the time set aside for our yearly clean up period, the amount of refuse and rubbish collected was very little over the average weekly collections handled throughout the year.

The New Jersey Tenement House Commission cooperated with this Department in cleaning up some of the badly congested tenement houses in the city. In making their inspections of the structural side of the buildings, if they came across any insanitary conditions which warranted our attention we were notified of same, and in this way many instances that might have escaped our attention were brought to light and improved.

Instructions have been issued to the inhabitants of these localities on the importance of proper sanitation and ventilation of living rooms. A set of rules for the guidance of householders is in contemplation and when printed will be posted in all tenement houses throughout the city. Having these instructions constantly before the tenement dwellers, we believe will go a long way in eliminating much of the nuisances created by the negligence and disregard of these people.

#### THE ICE SHORTAGE.

It became apparent to us in the spring of 1919 that the Health Department was in for a busy summer, especially with regard to the ice situation. During the early months of the year we heard reports of the serious ice shortage, due to the unusually mild winter and of the lack of labor for harvesting, also the shortage of freight cars to haul the ice from any considerable distance, at which points the shortage was not so great.

The Health Department requested all ice dealers before obtaining a license to present their scales and ice tongs at the Weights and Measures Department for an accurate weight of same. This was necessary to insure the correct weight being given to the householders, as the scarcity of ice was of such a nature that the dealers resorted to selling the same by poundage instead of by piece, as was the practice in previous years.

As the season progressed the Health Department was the

target for numerous complaints in reference to overcharging and profiteering by the ice dealers. Upon receipt of a complaint an inspector would be detailed to the case to verify the report and if a violation existed the dealer would be summoned before the Mayor to explain why his license should not be revoked. The excuse often given was that the ice was not averaged but cut according to the size the dealer thought warranted for price charged. It was the contention of the ice dealers that average pieces of ice that would cost less than fifty (50) cents would be cumbersome and a loss of time to them.

During the month of August a number of ice dealers charged with profiteering were requested to appear at a meeting in the Mayor's Office in the City Hall, to answer charges preferred against them. After questioning the dealers it was found that in some cases a profit of 100 per cent was demanded before the ice could be purchased by the householders.

The Mayor informed the ice dealers that if any of them were detected selling ice for more than 80 cents per one hundred pounds their license would be revoked immediately. He stated 80 cents per one hundred pounds in his opinion was a fair profit to realize upon their investment.

The Mayor instructed the Health Officer to have letters mailed to all retail ice dealers informing them of his decision and of the penalty involved. The dealers in general abided by the decision of the Mayor and very few complaints were heard in reference to overcharging for the remainder of the season.

LIST AND NUMBER OF LICENSES ISSUED BY THE SANITARY DIVISION FOR THE YEAR 1919, AS COMPARED WITH THE YEAR 1918

	1919	1918
Animal permits .....	100	104
Bird store licenses .....	11	10
Boarding house licenses.....	34	33
Chicken licenses .....	1,857	1,834
Commission house permits....	33	24
Ice licenses .....	308	293
Refuse permits .....	50	49
Scavenger permits .....	23	15
Slaughter house licenses .....	34	35
Stall holders' permits .....	16	28

There were 256 cases turned in to the Law Department, of which 19 cases are still pending. Costs of court were paid in 193 cases. Judgments were obtained on 44 cases.

The following inspections were made during the year in the interest of the Anti-Fly Campaign:

	1919	1918
Stables and cow barns .....	2,143	2,429
Manure accumulations .....	455	851
Scavenger dumping grounds.....	282	257
Inspection of yards .....	28,063	31,167
Number of yards found insanitary .....	3,611	4,395
Cattle and chicken slaughter houses inspected .....	1,000	581

WORK PERFORMED BY SANITARY DIVISION

	1919	1918
Total number of inspections made .....	84,677	72,682
Inspections from complaint cards .....	4,576	5,662
Original inspections made .....	79,824	66,796
Special inspections made .....	277	230
Total number of re-inspections made .....	23,133	24,511
Total number of nuisances found .....	21,915	25,772
Number of verbal notices served .....	9,294	7,681
Number of written notices served .....	4,722	5,063
Number of special notices served .....	118	218
Total number of notices served .....	14,134	13,562
Abatements from verbal notices .....	9,883	9,151



	1919	1918
Abatements from written notices	10,377	13,915
Abatements from special notices	78	370
Total number of abatements	20,338	23,436
Alleyways inspected	12,712	11,244
Alleyways insanitary ..	1,667	1,621
Areaways inspected	9,812	8,099
Areaways insanitary	1,637	2,120
Cellars inspected	21,570	23,228
Cellars insanitary	2,747	3,462
Yards inspected	28,063	31,162
Yards insanitary . . . . .	3,611	4,395
Cattle and chicken slaughter houses inspected	1,006	571
Cattle and chicken slaughter houses insanitary	22	65
Cisterns and wells inspected . . . . .	34	18
Cisterns and wells insanitary . . . . .	14	6
Cisterns and wells closed	14	2
Factories inspected .. . . .	981	577
Factories insanitary	179	83
Schools inspected	475	628
Schools insanitary	5	2
Stores inspected	4,600	4,294
Stores insanitary	370	303
Tenement houses inspected	4,971	5,486
Tenement houses insanitary	732	418
Houses unfit for habitation	27	24
Living rooms insanitary	1,007	806
Dark and windowless rooms	44	120
Theatres inspected . . . . .	390	154
Theatres insanitary	14	28
Buildings with no city water supply	310	1,332
Buildings unprovided with W. C. or P. V.	21	67
Buildings with roofs, storm gutters or leaders defective	1,115	892
Plumbing in or on premises defective	1,235	1,572
Sewer connections ordered	74	53
Pits under water closets defective	86	113
Water closets not supplied with water	909	2,548
Privy vaults and cesspools inspected . . . . .	259	186
Privy vaults and cesspools insanitary	90	60
Privy vaults and houses ordered reconstructed	23	7
* Privy vaults ordered cleaned and filled . . .	56	20
Garbage and refuse accumulation.	3,440	5,456

	1919	1918
Stables inspected .....	2,143	2,429
Stables insanitary .....	507	549
Manure accumulation .....	455	856
Manure bins and pits uncovered.....	404	498
Streets insanitary .....	131	57
General inspection cards filed in office.....	83	37
Visits to agents and owners of real estate.....	2,064	1,889
Warning calls handed to violators of spitting ordinance .....	419	196
Arrests made for violating spitting ordinance ..	84	28
Days detailed to enforce spitting ordinance.....	33	14
Number of spitting signs posted .....	95	61
Number of hours in court.....	447	497
Number of inspectors for chicken and ice permits	2,267	1,581
Notices served for inspectors assigned to other districts .....	1,681	2,139
Dead animals reported .....	259	325
Complaints referred to other city departments	131	148
Scavenger dumping grounds inspected.....	282	257
Number of quick summons served .....	51	
Number of pre-school clinic notices served.....	566	117
Number of clean-up circulars posted .....	1,305	1,015
Number of venereal disease signs posted. ....	1,359	1,444
Number of sidewalk cleaning circulars delivered.	2,983	
Number of clinic cases investigated .....	296	262
Number of official calls to City Hall .....	175	227

The scavenger collections for the year 1919, as reported by the sanitary inspectors in the sixteen wards in the city, have been normal with the exception of the month of December at which time the collections in some sections of the city were poor owing to weather conditions.

Five sanitary inspectors were detailed during the spring of the year on survey work of the congested districts in the city. Four sanitary inspectors were detailed for three weeks and two men for two months on sidewalk inspection. Two sanitary inspectors were detailed for one month and one sanitary inspector for five months at the municipal food station to assist in distributing the foodstuffs to the various depots throughout the city.

Respectfully submitted,

WILLIAM H. YOUNG,     •  
Chief Clerk.

REPORT OF SPECIAL DETAILED INSPECTOR  
FOR 1919.*Dr. Charles V. Craster, Health Officer.*

DEAR SIR, -I herewith present my annual report for year ending December 31, 1919:

There has been a slight decrease in the number of persons bitten by dogs for the year 1919—494 as compared with 505 for the year 1918. The brains of nineteen animals were examined at the laboratory (three from out of the city). Of these, five proved to be positive for rabies and fourteen were negative. Four persons received the Pasteur treatment, as compared with forty-three for the preceding year. A record of each case and its subsequent history is kept on file at the laboratory.

The following table shows the figures with regard to the number of dog bites and rabies cases in Newark since 1910:

	Persons Bitten	Animals Examined	Positive Cases	Negative Cases	Persons Given Anti Rabie Treatment
1910	213	83	31	12	40
1911	350	28	13	15	20
1912	586	46	21	25	62
1913	612	48	17	26	41
1914	509	60	7	28	13
1915	509	88	8	30	8
1916	432	17	3	14	4
1917	506	42	20	22	31
1918	505	25	15	10	43
1919	494	19	5	14	4
Total	4,787	321	130	177	267

Following is a report on investigations in rabies work:

Persons bitten by dogs . . . . .	481
Persons bitten by cats . . . . .	6
Persons bitten by horses and other animals . . . . .	5
Total number of persons bitten and cases investigated . . . . .	493
Original inspections . . . . .	410
Reinspections (dogs under observation) . . . . .	588
Final inspections (dogs under observation) . . . . .	428
Total number of inspections made . . . . .	1,671
Cases reported by Police Department and investigated . . . . .	132
Dogs bitten . . . . .	51
Cats bitten . . . . .	3
Dogs sent to pound and destroyed . . . . .	61
Cats sent to pound and destroyed . . . . .	3
Kennels inspected . . . . .	37
Complaints investigated (dogs), miscellaneous . . . . .	80
Hours in court . . . . .	5
Dogs' brains examined (Neg 14, Pos. 5), total . . . . .	19
Horses' brains examined . . . . .	1
Dogs' brains examined (out-of-town) . . . . .	3
Persons receiving Pasteur treatment . . . . .	4

#### GLANDERS AND ANTHRAX.

Glanders cases investigated and stables disinfected . . . . .	2
Glanders cases, reinspections . . . . .	3
Cases of anthrax investigated . . . . .	2
Samples of material bacterially examined for anthrax . . . . .	5

#### SAMPLES OF WATER TAKEN FROM PUBLIC SWIMMING POOLS.

105 Halsey Street, Y. M. C. A. Swimming Pool . . . . .	14
53 Washington Street, Y. W. C. A. Swimming Pool . . . . .	14
10 West Park Street, Swimming Pool . . . . .	14
145 Howard Street, Swimming Pool . . . . .	14
32 Mercer Street, Swimming Pool . . . . .	13
East Side Public Bath, Swimming Pool . . . . .	12
36 Charlton Street, Swimming Pool . . . . .	12
Total . . . . .	93

## SAMPLES OF WATER FROM WADING POOLS

Branch Brook Park	2
West Side Park	2
Weequahic Park	2
Total	6

SAMPLES OF CITY WATER SUPPLY TAKEN AT THE  
FOLLOWING PLACES FOR CHEMICAL ANALYSIS

Oak Ridge Stream, above Clinton Stream	11
Clinton Stream, above Oak Ridge Stream	11
Kanouse Creek, above Pequannock River	11
Echo Lake Stream, above Pequannock River	11
Macopin Intake at Gatehouse	11
Cedar Grove Reservoir, Inlet Gatehouse	11
Cedar Grove Reservoir, Outlet Gatehouse	11
Belleville Reservoir, Inlet Gatehouse	11
Total	88

SAMPLES OF ICE TAKEN FOR BACTERIOLOGICAL  
ANALYSIS.

Union Ice Company, 103 Newark Street	1
Newark Hygeia Ice Company, 309 Ogden Street	1
North Newark Ice and Ref. Company, 96 Sylvan Avenue	1
Orange Mountain Ice Company, 4 North Fourteenth Street	1
Krueger Hygiene Ice Company, Murray Street	1
S. Albourn Ice Company, 55 Badger Avenue and 73 Hayes Street	2
Total	7

Following table shows the amount of miscellaneous work of various descriptions performed:

Samples taken from septic tanks in Port Newark. ....	6
Number of samples taken from wells and other sources of our city . . . . .	10
Special inspections made. ....	13
Sanitary complaints investigated ....	27
Sanitary complaint reinspections. ....	19
Influenza posters placed in jitneys and inspections .....	263
Inspections of moving picture theatres.....	5
Inspections of proposed chicken slaughter houses .....	4
Inspections of lodging houses .. .	2
Inspections of scavenger dumping grounds ..	2
Inspections of dance halls .....	3
Inspections of public bath houses. ....	28
Special and miscellaneous work performed for the health officer .. .	39

Respectfully submitted,

CHARLES F. CONRAD,  
*Detailed Inspector.*

ANNUAL REPORT OF DETAILED INSPECTORS  
FOR 1919.*Dr. C. V. Craster, Health Officer.*

DEAR SIR.—We herewith submit our report for the year 1919:

Number of visits to watersheds	22
Number of visits to Cedar Grove Reservoir	22
Number of visits to Belleville Reservoir ..	22

SAMPLES OF CITY WATER SUPPLY TAKEN AT THE  
FOLLOWING PLACES FOR BACTERIOLOGICAL  
AND CHEMICAL ANALYSIS

Oak Ridge Stream	22
Clinton Stream	22
Kanouse Stream	22
Echo Lake Stream	22
Macopin Intake inside of Gatehouse	22
Cedar Grove Reservoir outside Inlet Gatehouse	22
Cedar Grove Reservoir outside Outlet Gatehouse	22
Belleville Reservoir inside Inlet Gatehouse	22
Belleville Reservoir outside Outlet Gatehouse	22
Board of Health Building, Faucet City Dispensary	22
Prudential Insurance Company Building .....	22
Submarine Boat Corporation, Port Newark ..	2
Butler, N. J., Water Supply ..	4
Number of inspections made in watersheds	108
Number of calls made in watersheds ..	102
Total number of samples taken..	248
Number of days at watersheds..	22
Numbered of licensed dance halls.	61
Number of licensed motion picture theatres	37

## INSPECTIONS

Number of special inspections made ..	140
Number of inspections made with other inspectors	41
Number of inspections made with Health Officer ..	29
Number of investigations made out of the city	151
Lodging houses ..	72
Poultry slaughter houses	192

Bird stores .....	13
Dance halls .....	42
Motion picture theatres .....	1
Total number of inspections.....	998

## REINSPECTIONS.

Special .....	209
Lodging houses .....	14
Poultry slaughter houses .....	47
Bird stores .....	2
Dance halls .....	26
Motion picture theatres.....	4
Total number of re-inspections .....	302
Official calls made on health matters .....	917
Days in office for Health Officer..	88
Days on special work .....	54
Hours in court .....	61

## POULTRY SLAUGHTER HOUSES.

	Appr'd	Rej't'd	Total
Applications for public poultry slaughter houses	1	5	6
Applications for private poultry slaughter houses	6	51	57
Number of public poultry slaughter houses in the city .....			9
Number of private poultry slaughter houses in the city .....			29

Respectfully submitted,

BENJAMIN J. CAHILL,  
Detailed Inspector.



## REPORT OF CHIEF PLUMBING INSPECTOR

*To Dr. Charles V. Craster, Health Officer.*

DEAR SIR:—I herewith hand you the report of the Plumbing Staff for 1919:

The installation of plumbing, which had fallen off to a considerable extent at the close of the year, became quite active in the early part of the year and, because of the shortage of houses, promised to increase to great proportions. But with the demand came higher prices and a scarcity of materials. This condition caused a decided slump in building activities. While the number of plans filed increased about 50 per cent over the previous year, a far greater number had been expected. New plumbing installations and additions in factories continued to a considerable extent, and the toilet facilities in this class of building are improving rapidly. The construction of dwellings has been carried on almost entirely by builders who build to sell. The average man finds building costs greatly beyond his means.

The Plumbing Code Committee is reviewing the work it had done in formulating a new code, with the purpose of trying to reduce the cost of plumbing installations without detriment to sanitary plumbing.

The cold weather again demonstrated the impracticability of the yard and piazza water closets, showing that it is almost impossible to keep these water closets in a sanitary condition when the temperature is below the freezing point. Therefore, I believe that the installing of this type of water closet should be prohibited.

The septic tanks which have been installed during the past few years are still functioning and we have not learned of any which have had the sludge removed, thus proving that this type of sewage treatment in our unsewered districts is meeting our expectations. The following is a summary of the work accomplished during the past year:

## Plans Approved and Filed—

	1919	1918
New systems	674	
Additions	959	
	— 1,633	1,093
Plans rejected	15	46
Plumbing permits issued	1,633	1,093
Sewer permits issued	581	195
Relay sewer permits issued	100	49
Cesspool permits issued	6	6
Privy vault permits issued	1	0
Water tests	1,207	834
Smoke tests	370	393
Plumbing inspections	4,223	4,345
Special inspections	709	778
Sewer inspections	929	477
Final inspections	1,231	1,083
Violations served	37	47
Violations notices complied with	22	57
Complaints received	108	112
Notices served	60	64
Notices complied with	61	77
Law suits instituted	18	52
Law suits discontinued	12	21
Law suits pending	6	4
Penalties imposed	\$225 00	\$145 00
Hours in court	51	94
Meetings of Examining Board	12	9
Applications for master plumber examination	41	12
Passed examinations for master plumber	26	8
Master plumber licenses issued	331	310
Septic tanks installed	3	16

Respectfully submitted,

CHARLES A. HALLGRING,  
*Chief Plumbing Inspector.*

ANNUAL REPORT

OF THE

Division of Disinfection



## REPORT OF THE DISINFECTING DIVISION.

January 1, 1920.

*To Dr. Charles V. Craster, Health Officer.*

DEAR SIR: I herewith submit to you the report of the Disinfecting Division for the year 1919:

I would recommend that a suitable building in the city be either leased or acquired for the detention of persons who have been exposed to disease and who refuse to submit to such measures as provided by law for their protection and that of the community at large. Such a place would be invaluable in a smallpox outbreak where contacts refuse to submit to vaccination, or in other diseases where quarantine measures imposed are not duly observed. There can be no doubt that epidemics are largely due to the carelessness on the part of persons in contact with the original focus or foci who do not exercise proper personal hygiene and precautions of a preventive nature.

Due to the growing population of the city and the increased number of contagious disease cases the division must investigate and supervise for the conservation of the public health, I would at this time recommend the addition to the Disinfecting Division of three or four more inspectors. This is the minimum requirement for new forces based upon the increased work of the division, and a very definite effort should be made to secure it.

## HOUSES QUARANTINED.

	1919.	1918.
Diphtheria, including membranous croup (placarded) .....	1,565	974
Scarlet fever (placarded) .....	820	515
Measles (placarded) .....	661	7,779
Infantile paralysis (placarded) .....	9	19
Smallpox (placarded) .....	1	2
Epidemic meningitis (placarded) .....	42	103

	1919	1918
Typhoid fever (not placarded)	72	69
German measles (not placarded)	125	474
Whooping cough (banded)	642	2 139
Influenza (not placarded)	4,188	29 704
	—	—
Total number of cases . . . . .	8,125	41 778

## DISINFECTIONS.

	1919.	1918
Diphtheria, including membranous croup.. . . .	1,362	884
Scarlet fever .....	682	463
Tuberculosis .....	976	1,214
Epidemic meningitis . . . . .	39	101
Infantile paralysis . . . . .	9	18
Smallpox . . . . .	1	2
Special .....	296	245
	—	—
Total disinfections . . . . .	3,395	2 927

## MISCELLANEOUS.

	1919.	1918
Visits and reinspections.....	88,019	139 435
Nuisances found . . . . .	143	244
Funerals supervised . . . . .	133	1 373
Control tests .....	511	236
Number of rooms disinfected	10 495	9,016
Removal by warrant of persons ill with commu- nicable diseases to Isolation Hospital. ....	40	0

Respectfully submitted,

THOMAS MULLIGAN,  
Chief Disinfecting Division.

## DISINFECTING DIVISION

MONTH, 1919	NUMBER OF CASES										NUMBER OF DISINFECTIONS							MISCELLANEOUS								
	Dysentery	Scarlet Fever	Measles	German Measles	Infantile Paralysis	Whooping Cough	Typhoid Fever	Epidemic Meningitis	Smallpox	Influenza	Total	Dysentery	Scarlet Fever	Typhoid Fever	Infantile Paralysis	Epidemic Meningitis	Spectra	Smallpox	Total	Deaths	Funerals	Infants Disinfected	Control Tests	Removals by Warrant		
January	128	77	12	5	2	23	0	5	0	156	297	80	46	99	2	4	21	0	902	17	46	14	47	642	35	0
February	169	87	0	0	0	19	5	5	0	1087	1638	184	58	86	0	5	14	0	967	16	29	11	12	643	53	0
March	148	110	24	16	1	11	0	7	0	777	1594	170	8	27	0	6	24	0	800	7,864	7	14	1,865	44	0	
April	178	119	26	17	0	28	2	5	0	235	503	156	93	106	1	4	39	0	381	6,740	5	10	1,757	29	0	
May	151	105	33	21	0	44	8	6	1	0	306	167	98	84	0	5	78	1	400	6,588	6	8	1,734	46	4	
June	126	59	39	11	0	52	2	2	0	2	1	122	96	66	0	2	22	0	399	7,385	17	9	778	49	12	
July	90	51	27	6	1	71	1	1	0	0	228	80	36	22	1	1	16	0	241	5,114	12	5	870	46	6	
August	64	18	3	1	1	81	0	1	0	19	197	50	17	65	2	0	10	0	123	4,335	28	9	565	33	1	
September	72	26	7	2	1	58	22	3	0	16	213	59	8	75	0	3	16	0	175	4,432	16	5	538	31	2	
October	122	38	57	6	2	67	12	3	0	63	369	41	25	62	2	3	30	0	214	5,871	8	8	606	60	5	
November	182	61	120	7	1	73	6	1	0	48	499	162	43	74	1	1	32	0	314	7,427	8	4	882	46	4	
December	141	89	605	21	0	115	6	5	0	48	730	152	62	63	0	5	29	0	312	8,556	7	7	805	37	6	
Totals	1760	620	661	125	9	642	72	42	1	4188	8125	1868	682	976	9	30	226	1	3395	88,619	143	133	10,495	511	40	

REPORT OF DIVISION OF CONTAGIOUS  
DISEASES.

*To C. V. Craster, M. D., D. P. H., Health Officer.*

DEAR SIR: I beg to submit the following report of Contagious Diseases for 1919:

## DISEASE CASES BY MONTHS AND WARDS

## DIPHTHERIA.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	27	7	26	5	2	13	4	4	9	2	4	3	5	22	6	15	154
February	10	5	20	4	7	7	5	7	12	3	9	6	12	13	9	25	154
March	13	3	22	0	4	7	5	8	8	2	9	6	17	19	9	17	149
April	15	11	20	3	8	5	6	8	10	8	10	1	6	14	21	18	161
May	11	5	21	5	6	4	1	11	10	4	9	2	13	7	11	29	149
June	5	1	23	0	2	2	2	5	9	5	4	2	17	26	5	14	122
July	7	7	15	0	3	2	2	1	2	0	8	0	15	16	0	23	96
August	-	-	-	-	-	-	1	-	-	-	-	1	1	-	-	8	41
September	2	3	20	1	2	1	2	1	1	7	2	4	6	16	1	4	72
October	4	5	20	1	6	9	5	10	11	8	3	8	8	10	1	12	121
November	7	2	15	4	12	6	9	18	20	16	6	8	22	16	4	15	182
December	8	1	16	4	10	6	3	7	12	12	2	7	27	13	7	7	141
Total	14	-	-	-	-	-	4	-	-	-	-	18	4	84	74	187	1,266

## SCARLET FEVER.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	5	4	7	3	0	8	3	12	3	0	1	4	19	5	4	7	89
February	7	5	4	1	2	10	0	10	2	1	4	3	22	6	4	4	87
March	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
April	3	2	13	2	2	3	10	2	2	7	6	25	7	16	3	19	115
May	7	1	13	0	2	8	2	1	6	4	3	6	22	14	3	11	103
June	4	-	-	0	1	-	1	-	1	-	0	-	1	-	-	-	59
July	-	-	-	-	-	-	1	-	-	-	-	-	-	-	4	-	5
August	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
September	4	0	3	1	1	1	2	2	1	1	0	3	1	4	1	1	28
October	5	-	0	-	-	0	-	-	1	-	1	-	-	-	-	1	28
November	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1
December	-	-	-	-	-	-	-	-	-	-	-	-	4	1	1	5	29
Total	64	29	68	14	18	63	49	63	37	27	25	60	143	77	35	59	829



## MEASLES

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January		0		3		1	1	1	0	0	0	0	2	2	0	1	15
February	1	0		2			0	1	1	0	0	0	1	0	0	1	9
March		1		0		1	0		7	1	2	0	2	1	0	1	19
April		0		3		0	1	4	7	1	0	0	2	1	0	2	27
May	0	0		0		2	1	2	6	3	7		1	3	1	2	33
June		3		0	1				10	6	7	0	1	2	0	1	39
July	1	1	3	0	0	2	0	0	4	2	0	4	3	2	0	4	27
August		0		0		0			0	0	0	1	0	0	0	0	3
September		0		0	0			1	5	0	0	0	0	0	2	0	7
October		0	1	0				4	7	1	0	0	0	0	0	2	57
November		1		0		3	2	7	3	0	13	0	3	0	1	1	130
December	1	15		4		8	2	13	0	0	57	6	27	7	13	2	309
Total	18	34	31	12	10	17	42	31	48	13	86	12	43	18	16	25	601

## TYPHOID FEVER

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	1		0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
February		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
March	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
April	0		0		1	0	0	0	0	0	0	0	1	0	0	0	3
May		0		0	0	0	0	0	0	1	0	0	0	0	0	1	2
June		0	0		0	0	0	0	0	0	0	0	0	0	0	0	0
July		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
August	0	1	4	1	0	0	0	0	0	0	0	0	0	1	1	1	9
September	1	0	0	1	1	1	1	2	5	5	1	0	1	3	2	2	29
October	1	1	0	1	0	2	1	0	1	2	0	0	2	0	1	0	12
November	0	0	0	0	0	0	0	0	1	2	0	0	1	1	0	0	5
December	1	0	0	0	0	2	2	0	0	0	0	1	0	0	0	0	6
Total	5	4	5	3	2	6	4	2	7	10	5	2	4	3	6	4	72

## PUERPERAL SEPTICAEMIA.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
February	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3
August	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
September	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
October	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	1	0	0	0	1	0	0	0	0	0	1	2	0	0	0	0	5
Total	0	0	0	1	0	0	0	0	1	2	1	2	0	1	1	1	14

PUERPERAL FEVER

## ERYSIPELAS

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0										1	1	2	2	0	1	13
February	5										2	2	1	0		3	29
March	0										4	4	8	1	1		29
April	5		1								2	1	3	2	1	1	37
May	7										1	1	2	1	0	2	35
June	0		1	1	1		0	2	2	1	0	2	0	0	0	0	18
July	1									1		0	0			0	13
August	0									0		2	1	1	1	1	11
September	0									0		1	0	1	0		4
October	0											2	0	0	0	0	6
November	0									0		0	0	0			0
December	1									0		2	2	1	2		20
Total	19		1				1			12	8	21	11	10	1		205

## SCARLET FEVER

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0					0	0	0	0	0	0	0	0	0	0	0	0
February	0					0	0	0	0	0	0	0	0	0	0	0	0
March	0					0	0	0	0	0	0	0	0	0	0	0	0
April	0					0	0	0	0	0	0	0	0	0	0	0	0
May	0					0	0	0	0	0	0	0	0	0	0	0	1
June	0					0	0	0	0	0	0	0	0	0	0	0	0
July	0					0	0	0	0	0	0	0	0	0	0	0	0
August	0					0	0	0	0	0	0	0	0	0	0	0	0
September	0					0	0	0	0	0	0	0	0	0	0	0	0
October	0					0	0	0	0	0	0	0	0	0	0	0	0
November	0					0	0	0	0	0	0	0	0	0	0	0	0
December	0					0	0	0	0	0	0	0	0	0	0	0	0
Total	0					0	0	0	0	0	0	0	0	0	0	0	1

## MALARIA

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0					0	0	0	0	0	0	0	0	0	0	0	0
February	0					0	0	0	0	0	0	0	0	0	0	0	0
March	0					1	0	0	0	0	0	0	0	0	0	0	1
April	1					0	0	0	0	0	0	0	0	0	0	0	2
May	0					0	0	0	0	0	1	0	0	0	1	1	3
June	0					0	0	0	0	0	1	0	0	0	0	0	2
July	0					1	0	1	0	0	1	0	0	0	0	0	6
August	1					0	0	1	0	0	0	1	0	0	2	2	9
September	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
October	0	1	0			0	1	0		0	0	0	0	0	0	0	3
November	0					0	0	0		0	0	0	0	0	0	0	0
December	0					0	0	0		0	0	1	0	0	0	0	1
Total	3					3	1	2		2	2	2	0	0	2	2	29

## MENTAL DEFICIENCY.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January																	0
February																	2
March																	4
April																	1
May																	3
June																	0
July																	3
August																	2
September																	2
October																	3
November																	0
December																	0
Total	1	1						0	0	1	1	0	2	7	1	5	19

## DYSENTERY.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0											0
February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	1	0	0	0	1	0	0	0	0	0	1	0	0	0	5

## EPILEPSY.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	3
February	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
March	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	3
June	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	3
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
September	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
October	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
November	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	3
December	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
Total	0	2	1	0	0	1	0	3	1	1	2	2	7	3	0	1	27

## CHANCROID

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	2	1	0						0	0	0	0	0	0	0	0	3
February				0	0					0	0	0	0	0	0	0	2
March		1								0	0	0	0	0	0	0	2
April		1	0		0	0				0	0	0	0	0	0	0	1
May		1	1	1	4	4			0	4	2	3	3	4	1	3	71
June		0	0	0	0	0	0				0	0	0	0	1		1
July				1	2	3	8	3		2	4	4	2	6	6	4	86
August		1	1		0	0					0	0	0	0	2		3
September		1	1	2	0	0	0	0	0	0	0	0	0	0	1	0	4
October		0	1	0	0	0			1	1	0	0	0	0	0		3
November					0				1	1	0	0	0	1	0	0	2
December					0				0	1	1	0	0	0	0		2
Total	1	4	3	16	7	6	11	5	13	8	7	7	5	11	9	9	182

## GERMAN MEASLES

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January			3	2	0	0	1	0	0	0	0	0	0	1	0	2	9
February	0	0	0	2	0	0	0	0	0	0	0	0	1	1	1	0	13
March	0	0	1	2	0	1		0	0	0	0	0	0	1	0		16
April		0	2	0	0	1	2	0	0		1	2		6	1	3	24
May		0	0	0	0	1	0	1	0	0	0	2	3	0	1		14
June			0	0	0	0		0	0	0	0	0	0	0			2
July		2	3	0	0	1			0	1	0	0	0	0			7
August		0	1		1	0			0		0	0	0	0	0		2
September		0	1		0	0			0	0	1	0	0	0	0		2
October		0	0	0	0	1		1	0	1	0	0	0	1	0		7
November		0	1		0	0	7	0		0	0	0	0	0	0		8
December		0	1		0	0	1	0	1		0	2	3	5	1		22
Total	0	0	17	6	3	6	11	10	7	0	7	8	8	15	2	8	136

## TRACHOMA

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
February		0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
March			0	0	0		0				0	0	0	0	0		1
April										0	0	0	0	0	0	0	0
May		0	1	0	0	0		0	0		0	0	0	0	0	0	2
June	0	0	0		0			0		0	0	0	0	0	0	0	0
July		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3
August		0	1	0	0	0		0	0	0	0	0	0	0	1	0	4
September	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	6
October		0	0	1	0			0		1	0	1	0	1	0	0	3
November		0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	3
December		0	0	0	0	0	0	0	0	0	1	0	1	0	0		2
Total	2	4	4	1	2		2	0	0	2	0	2	0	3	1	0	24



## ARSENIC POISONING.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1

## MERCURY POISONING.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1

## OPHTHALMIA

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
February	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
March	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
April	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	1	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	6
August	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
September	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
October	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
November	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	2
Total	5	2	3	0	0	1	0	2	0	3	1	0	2	0	0	0	18

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	8	4	1	3	0	0	3	0	0	2	0	1	0	0	1	8	20
February	1	1	2	5	6	4	1	3	1	3	1	2	2	0	2	0	47
March	4	4	5	3	1	1	3	4	1	1	1	3	4	7	4	1	61
April	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	18
May	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	71
June	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	74
July	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
August	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6
September	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17
October	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
November	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7
December	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	51
Total	6	13	2	4	21	20	34	2	28	20	1	12	3	6	10	18	561

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	To total
January																	
February		1	0			0		0	0	0	0	0	0	0	0	0	1
March																	0
April																	0
May																	0
June			1						1	0	0	0	0	0	0	0	2
July						1		0	0	0	0	1	0	0			2
August									0	0	0						0
September																	0
October								0	0	0		1					2
November																	0
December								0	0		0	0	0				0
Total		1	2	0	0	1	0	0	1	0	0	2	0	0	0	0	6

[illegible]



## MUMPS

[illegible]

### Abstract

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
January	25						9	6		8	7	2	9	0	19	11	7	175
February	11	8	4				7	11	0	3	4	8	9		10	7	8	140
March	18	1					8	7		10	5	7	11		15	8		183
April	13	1					8	4		0	5	7	4		9	1	7	163
May	10	1					7	8	2	13		3	4		9	16	7	140
June	16	1								5	4		4		7	10	8	142
July	16																	0
August	16																	0
September	15						8	8		0		4	4	13	14			140
October	14						7	8	4	17	0	8	8		7	4		165
November	10						8	4	7	8	1	0	5	10	8	9	7	107
December	9						4	0	6	5	5	3	0	10	10	4	8	130
Total	170	4	2	0	2	8	17	94	99	80	64	67	100	135	97	78	1,880	

$$A = \text{colpin}(C_1 \cup \dots \cup C_r) \cup \text{colpin}(C_{r+1})$$

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
January	1	4	6	1	2	6		6	1	0	1	0	3	6	0	7	18
February				1	0					4			5	0	0	3	1
March				1	6			4	0	5	0	7	1	0	0	6	18
April	5	2	2				4	6	5		7	7	2	7	2	2	52
May							3	1	3	5	7		8	3	1	3	45
June	4	1	4	6	2	1	6		3	5	3	4	6	1	6	1	52
July						1	1					9	9	2	3	6	71
August	1							3	1					4	16	12	83
September	5				4	1					1			3	4		68
October			5				4	1				6	1	8	1	7	67
November	4	5			3	4	2	11	3	7		7	4	5	5	3	73
December				1		1	3	1	5	2	1	6	4	15	19		114
TOTAL	37	7	13	13	14	14	56	47	31	25	9	26	7	49	41	50	644

## LOBAR PNEUMONIA.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	8	4	4	16	8	24	1	7	5	30	13	14	30	25	10	12	371
February			1	12	8	5	1	3	28	1	7	8	17	9	6	14	147
March				17	1	5	5	1	1	1	8	1	8	9	8		198
April	2	1	8	7	8	11	1	1	1	7	14	2	11	5	8		181
May	20	8	13	4	0	5	4	5	7	21	6	7	5	9	3	3	129
June	14	2	2	1	3	1	2	4	3	6	1	5	3	6	0	0	53
July	8	3	4	0	0	1	4	2	1	5	0	2	0	2	0	0	32
August	9	0	3	3	6	2	5	2	4	7	2	4	5	6	0	4	62
September	6	1	4	0	6	1	2	2	3	9	1	4	4	5	0	1	49
October	16	2	4	2	3	4	1	3	2	7	4	1	3	6	1	3	62
November	16	4	0	2	4	5	5	4	8	9	4	14	4	10	1	5	96
December	20	5	15	4	20	10	13	20	13	23	3	9	11	12	1	7	184
Total	216	68	31	64	160	71	81	164	114	177	51	60	115	130	36	65	1,461

## INFLUENZA.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	117	77	18	7	8	8	8	23	118	19	16	5	64	146	77	232	944
February	42	52	85	21	66	57	32	125	64	78	55	38	89	113	29	86	1,027
March	48	29	70	17	52	52	17	94	44	28	29	67	87	60	34	40	777
April		6	20	6	5	8	5	12	13	6	9	18	20	33	7	38	217
May	5	4	0	1	3	0	0	6	2	0	2	3	6	3	0	2	37
June	0	0	0	1	0	1	0	3	0	0	0	0	1	0	0	1	7
July	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
August	6	0	2	1	1	1	3	4	0	0	0	2	2	1	1	1	19
September	0	1	2	1	1	2	0	4	1	2	0	0	0	1	1	0	16
October	12	3	8	1	2	1	3	8	5	5	0	0	1	10	1	1	61
November	12	1	2	0	3	2	1	7	3	1	4	2	4	2	1	3	48
December	7	0	2	0	2	1	3	15	2	1	4	1	5	3	0	2	48
Total	34	18	38	76	35	74	1	8	7	1	56	28	57	37	17	14	603

## CHICKENPOX.

MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
January	13	2	11	16	3	0	1	11	18	2	2	6	13	12	11	20	143
February	9	4	9	10	3	3	0	33	9	2	1	4	12	13	6	24	142
March	1		14	7	1	5	1	30	3	8	7	20	10	14	31		217
Apr			3	1				1	44	7	25	10	30	25	8	49	272
May	1		38		1	1					25	5	32	31	9	36	250
June			2	1	4				17		6	2	29	20	4	9	156
July											27	1	2	1	1	4	36
August								1			0	1	0	4	0	3	18
September	0	1	3	2	0	0	0	0	0	0	0	0	2	7	1	1	16
October																	3
November	0	4	8	2	1	5	1	11	5	11	3	10	13	8	2	1	85
December	14	2	9	6	11	4	5	22	12	7	0	8	8	11	0	4	123
Total	6	4	1	3	2	5	2	27	15	6	7	3	2	4	1	13	607

# WORLD DISTRIBUTION OF DISEASES REPORTED IN 1919

DISEASES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
1. <b>Smallpox</b>	114	8	5	27	18	1	1	8	1	1	1	4	16	1-1	1	1	188
2. <b>Scarlet Fever</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3. <b>Diphtheria</b>	5	4	5	3	2	6	4	2	7	10	5	2	4	3	6	4	72
4. <b>Typhoid Fever</b>	1,777	17	100	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
5. <b>Typhus</b>	210	68	131	64	160	71	81	104	114	172	51	60	115	130	36	65	1,692
6. <b>Paratyphoid</b>	138	42	100	25	80	43	66	80	74	87	50	75	132	127	85	65	1,227
7. <b>Septicemic Meningitis</b>	5	1	3	2	7	1	1	5	1	1	1	5	2	3	2	2	42
8. <b>Infantile Paralysis</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	8
9. <b>Whooping Cough</b>	70	27	77	37	17	1	1	1	1	1	1	1	1	1	1	1	1
10. <b>Measles</b>	68	34	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11. <b>Scarlet Measles</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12. <b>Cholera</b>	97	41	19	81	1	1	1	1	1	1	1	1	1	1	1	1	1
13. <b>Malaria</b>	5	1	19	3	1	1	1	1	1	1	1	1	1	1	1	1	1
14. <b>Trachoma</b>	2	4	4	1	2	1	1	2	1	1	1	1	1	1	1	1	1
15. <b>Ophthalmia Neonatorum</b>	3	2	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16. <b>Syphilis</b>	17	17	25	10	10	1	1	1	1	1	1	1	1	1	1	1	1
17. <b>Madness</b>	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18. <b>Puerperal Fever</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19. <b>Puerperal Septicaemia</b>	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20. <b>Smallpox</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21. <b>Measles</b>	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22. <b>Dysentery</b>	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23. <b>Cholera</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24. <b>Anthrax</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25. <b>Infantile</b>	249	178	318	76	337	243	192	501	100	105	369	188	599	377	151	405	4,207
26. <b>Lead Poisoning</b>	1	3	10	6	7	1	1	1	1	1	1	1	1	1	1	1	1
27. <b>Arsenic Poisoning</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28. <b>Mercury Poisoning</b>	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29. <b>Gonorrhoea</b>	71	147	91	91	47	35	74	40	54	40	25	22	58	79	61	47	1,000
30. <b>Syphilis</b>	46	122	63	66	31	91	34	21	58	22	15	17	33	29	15	18	571
31. <b>Chorea</b>	11	34	23	16	7	1	1	1	1	1	1	1	1	1	1	1	182

DEPARTMENT OF HEALTH

Respectfully submitted,

EDWARD E. WORL, M. D.,  
Superintendent Contagious Diseases.

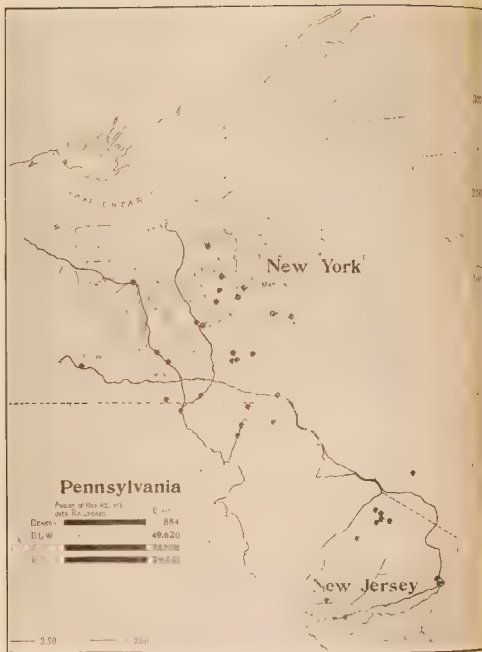


CHART SHOWING LOCATION OF CREAMERIES SUPPLYING NEWARK AND AMOUNTS BROUGHT IN BY VARIOUS RAILROADS

ANNUAL REPORT

OF THE

Food and Drug Division



# ANNUAL REPORT

## OF THE

# Food and Drug Division

*Charles V. Craster, M. D., Health Officer.*

DEAR SIR:—I herewith submit report of the Food and Drug Division for the year ending December 31, 1919:

### DAIRIES

Dairies inspected (not scored)	250
Dairies reinspected (not scored).	93
Dairies rescored	181

Owing to the requirement of the ordinance that all cows producing milk to be sold as Grade "A" Raw in this city must be tuberculin tested annually, and all cows retested after two months, it is necessary for inspectors to check up cows on every inspection.

Cows checked up during 1919 4,006

Out of 3,383 cows tuberculin tested, 101 were reactors, or 2.98 per cent.

### TABLE OF MILK EXAMINATIONS.

Sealed chemical samples taken	1,620
Chemical samples below standard	64
Bacterial samples taken of milk.	3,090
Bacterial samples within required amount	2,129
Preliminary samples taken	1,087
Sediment tests taken at creameries	2,135
Sediment tests taken at Food and Drug Laboratory (from September on)	1,079
Total number of milk samples taken	11,265

Of the above mentioned preliminary samples taken, 532 were analyzed by S. G. Sharvell, Chief Food and Drug Inspector of the Laboratory in this Department. Mr. Sharvell began analyzing these milk samples in July, 1919. It was previously taken exclusively by H. B. Baldwin, City Chemist.

Of the 3460 bacterial samples of milk taken, 253 were found to contain streptococci and pus. It is our rule, where streptococci and pus are found in a sample of milk, that the dairyman is immediately notified to protect the services of a veterinarian to pick out the cow with the infected udder and separate her from the rest of the herd. The dairyman is also notified not to use the milk from this cow for human consumption until free from infection. With three exceptions we have never found streptococci and pus in a second sample of this milk, due to the infection of the same cows.

#### MILK LICENSES

Wagon licenses issued . . . . .	319
Store licenses issued . . . . .	1,200
Wagon licenses . . . . .	\$ 648 00
Store licenses . . . . .	2,772 50
	<hr/>
	\$3,420 50

According to the Milk Ordinance, amount of bacteria allowed per cubic centimeter for each grade of milk is as follows:

A Raw . . . . .	100,000
A Pasteurized . . . . .	30,000
B Pasteurized . . . . .	50,000
Certified . . . . .	10,000

The following is a list of milk dealers supplying milk during the year of 1919, number of bacterial samples taken for year, bacterial count per year, chemical samples taken for year, fats and total solids of each dealer:



## RECORD OF DEALERS SELLING A RAW MILK.

[illegible]

## A RAW—Continued

DEALER	PRODUCER	Bacterial Samples Taken for Year	Bacterial Samples Above	Average Bacterial Count for Year	Chemical Samples	Fats	Total Solids
M	Jos Wolf	27	3	185,764	10	3.36	11.65
	Own	11	5	203,545	6	3.86	12.69
	Goldberg & Goldstein	19	9	212,000	7	3.72	12.55
	A. Mastonas	15	4	215,000	6	3.46	11.80
		10	11	219,531	6	3.38	11.91
		11	5	225,000	5	3.15	11.81
		10	10	220,000	9	3.10	11.77
	Own	28	1	224,737	8	3.55	12.11
	Pore Milk Farms	25	10	226,200	10	3.42	12.15
	Own	15	3	234,999	5	3.50	12.18
	Philip Feins	16	4	247,000	6	3.10	11.48
	Enstein	7	4	249,285	1	3.70	12.08
	W	11	5	250,777	5	3.15	11.65
		10	6	261,250	8	3.55	11.94
		8	6	298,681	8	3.50	12.32
		8	6	309,111	5	3.67	12.44
	M	8	8	313,666	8	3.74	12.20
		15	4	319,600			
	Own	20	12	344,650	9	3.70	12.12
	Own	24	4	362,066	1	3.52	12.25
	Philip Feins	18	12	378,333	7	3.40	11.97
	N. Drake	12	4	392,683	5	3.39	12.10
		12	9	431,041	6	3.39	11.70
	W. M. & L. Inc.	14	11	461,428	5	3.07	11.44
	Own	18	12	503,944	7	3.37	11.47
	Hunterman	21	10	731,666	8	3.39	11.71
W. C. L. I.	Pure Milk Farms	7	3	363,142	2	3.25	11.91
Marchionne, C.	Own	6	4	375,000	2	3.22	11.67

## A PASTEURIZED.

Gordon Farm Pro Co	Hinsdale N. J.	4	0	1,230	1	3.41	11.75
Gordon Farm Pro Co	Papakating N. J.	4	0	3,750	1	3.55	12.15
Richmond Farm Co	Richmond N. Y.	6	0	6,000	2	3.68	11.75
Fairfield Dairy Co	Own	23	4	25,585	10	3.26	11.52
Burgholtz F	F. W. Janssen	21	6	27,119	6	3.51	11.75
Becker Henry	Own	24	12	40,750	7	3.51	12.08
Schwer Chas	Killwag, N. Y.	2	0	47,500			
Alderney Dairy Co	Own	22	9	57,409	7	3.60	12.23
Seelig Bros	C. G. Stretch	20	3	116,600	10	3.51	12.17
Provost, Wm	Own	22	11	321,055	8	3.27	11.90

## B PASTEURIZED.

Merzwa Joe	Farmers' Exchange	1	0	5,000	1	3.60	11.73
Fischman, Wm	Geo. Robinson	5	0	5,500	2	3.75	11.90
Ross Wm	W. L. I.	1	0	5,000	3	3.31	11.65
Lea Farm	Lea Farm, Long Stroke	2	0	7,000	1	3.10	11.78
Lea Farm	S. M. Co. Pa.	16	0	10,260	3	3.77	11.77
Lea Farm	W. A. Co.	19		10,894	6	3.8	11.73
M. A. Co.	W. A. Co.	19		11,511	2	3.37	11.97
Lea Farm	St. River N. Y.	8		26,583	4	4.21	11.65
Newark Milk Co	Lebanon Pa.	20	3	33,117	10	3.10	11.31
Lea Farm	W. A. Co.	21	6	33,185	6	3.88	11.65
Lea Farm	W. A. Co.	7		35,114	4	3.60	11.77
Lea Farm	Lebanon, N. Y.	10	3	36,375	6	4.1	12.15
Lea Farm	W. A. Co.	25	8	47,140	6	3.50	12.11
Paskowitz, Wm	Robinson	12	2	48,666	3	3.46	12.05

## B PASTEURIZED—Continued.

[illegible]

## FOOD SUPERVISION.

The following is a list of the activities under this head:

## MEAT, POULTRY AND VEGETABLES INSPECTED.

Beef .....	15,378
Cattle ...	8,507
Steers .....	261
Cows .....	4,080
Lambs and sheep .....	72,784
Calves .....	40,014
Hogs .....	26,649
Poultry .....	7
Fish markets .....	754
Vegetables .....	55
Reactors inspected at slaughter .....	148
(80 belonging to dairymen supplying milk to this city)	

VISITS MADE TO PLACES WHERE FOOD WAS PREPARED AND SOLD,  
FOR THE PURPOSE OF ENFORCING THE STATE LAW AND  
SECTIONS OF THE SANITARY CODE CONCERNING FOOD.

Centre Market .....	318
Wholesale beef houses. ....	1,435
Butcher shops .....	1,434
Egg establishments .....	15
Commission houses .....	3,351
Bologna kitchens ...	51
Delicatessen stores .....	9
Drug stores .....	3
Macaroni shops .....	7
Food and drug samples taken .....	52
Restaurants inspected .....	379
Restaurants reinspected .....	1,048
Groceries inspected .....	147
Groceries reinspected .....	224
Confectionery stores inspected .....	142
Confectionery stores reinspected .....	718
Bakeries inspected .....	274
Bakeries reinspected .....	1,111
Cheese stores .....	1
Food and drug samples with State Inspector .....	257
Food and drug places inspected with State Inspector for sanitation .....	195

## DEPARTMENT OF HEALTH

105

Coffee and pool parlors where lunch is served	2
Bottling plants (for sanitary condition)	44
Sealed milk samples taken with State Inspector	161
Food and drug samples taken	195
Ice cream manufactories	194
Syrup plants	2
Wholesale groceries	6
Pretzel bakeries	1
Fruit inspections	3
Dairy stores	7
Food exposures	189
Complaints investigated	467
Complaints verified	218
Notices served (form notices)	747
Letters sent to creameries after inspections made	416
Wholesale wurst and lunch manufacturers' inspection	3
Pickle and cheese plants	4

PLACES FOUND TO BE O. K. AFTER INSPECTIONS MADE AND  
NOTICES SERVED.

Food exposures	59
Restaurants	155
Confectionery stores	17
Grocery stores	70
Bakeries	184
Butcher shops	10
Ice cream plants	25
Fish stands	2
Fruit and vegetable places	16
Bottling plants	5
Pickle plants	1
Coffee and pool rooms	2
Drug stores	1
Macaroni shops	7
Delicatessens	3

## COURT CASES

Cases tried	56
Hours in court	196
Fines for violations of milk ordinance	\$265 00
Milk cases dismissed on payment of cost of court	8

Food and drug cases (other than milk) dismissed on payment of cost of court. . . . .	34
Milk cases withdrawn . . . . .	3
Drug cases withdrawn . . . . .	2

#### RECORD OF THOSE APPEARING AT FOOD AND DRUG HEARINGS FOR VIOLATIONS

Number of milk dealers appeared at hearings for milk violations . . . . .	187
Milk dealers had licenses revoked to sell milk on account of violations of milk ordinance (9 later rescinded) . . . . .	11
Grocers appeared . . . . .	8
Butchers, bakers, druggists, grocers and restaurant proprietors appeared regarding violations of State Sanitary Act and the Sanitary Code . . . . .	7
Food exposure violators appeared . . . . .	17
Soda water manufacturers (soda, saccharine instead of sugar in the manufacture of soda water reprimanded but no legal action taken) . . . . .	12
Total number appeared at meetings . . . . .	251

#### 4. SAMPLES TAKEN.

Sour and sweet cream samples . . . . .	22
Soda water samples (for saccharine—12 manufacturers appeared at meeting; see above) . . . . .	61
Butter samples . . . . .	12
*Olive samples . . . . .	19
Barber supply samples . . . . .	5
Sausage samples . . . . .	6
**Wood alcohol barrel inspections . . . . .	8
Ice cream formula obtained (to be used for adoption of ice cream ordinance) . . . . .	17
Ice cream samples (for bacteria, to be used for adoption of ice cream ordinance) . . . . .	51
Ice cream samples (for chemical analysis, to be used for adoption of ice cream ordinance) . . . . .	28
Citrate magnesia samples . . . . .	1
Cider vinegar samples . . . . .	7
Inspections of stores for milk licenses . . . . .	115
***Sugar inspections (druggists) . . . . .	14
Restaurant approval certificates granted . . . . .	16

## \*RIPE OLIVES.

On November 3, 1919, this department was in receipt of a letter from the Department of Health, Detroit, Mich., calling our attention to five deaths in that city, at that time, from botulism. All the deceased had eaten ripe olives packed by a concern in California.

The Department of Health of Detroit furthermore stated in their letter that a telegram received from the corner of Stack County, Ohio, informed them that it was the same brand of ripe olives that caused the deaths of seven people at Canton, Ohio.

The olives which caused the deaths in Detroit were the "Mammoth Brand" of "Supreme Olives," code number on top of can "GX 26 02." This code was interpreted as follows: GX signifies that the olives were packed in the season of 1918-1919, 26 referred to the style and 02 was the batch number.

Therefore an investigation was made by this department of all olives found with the code number beginning GX and ending with 02. Nineteen samples were taken by inspectors of this department.

On February 14, 1920, we received a letter from the Department of Health, State of New Jersey, informing us that the Bureau of Chemistry of the United States Department of Agriculture reported the deaths of several persons in Memphis, Tenn., which fatalities were also traced to the consumption of ripe olives packed by this same company in California.

Upon receipt of this letter we promptly sent out circular letters to all grocers, butchers, delicatessens and any stores in this city where they would be likely to carry olives in their stock and as a result we received a number of samples which upon examination proved to be O. K.

Investigations proved that the olives examined by the Bureau of Chemistry, United States Department of Agriculture, had never been immersed in brine. If 7 per cent. of brine were used it would kill all bacilli botulini. It was also found that these ripe olives were sold in glass containers and had a very small percentage, if any, of brine. We believe that the failure to sterilize properly was due to the fact that when glass containers are used a high temperature may break the glass.

As a matter of fact, however, ripe olives in glass containers have been the cause of the various cases of botulism poisoning investigated by the Bureau of Chemistry, United States Department of Agriculture, Washington, D. C.

#### \*\*WOOD ALCOHOL BARRELS

On account of the sickness and deaths caused by the effects of wood alcohol, an investigation was made of paint and hardware stores to find out whether they sold their old wood alcohol barrels to persons engaged in the liquor business who would be liable to use same for storing whiskey and wine, etc., thus causing same to become contaminated.

However, the conditions of this character prevailing in Newark were of the best and it was found that no wood alcohol barrels were used for these purposes.

#### \*\*\*SUGAR INSPECTIONS

The effect of the sugar shortage upon the druggists in this city was cited until the city issued sugar and distributed same to them to be used for medicinal purposes.

However, to be just in the distribution of this sugar, inspections were made of 160 stores belonging to druggists who made applications to this office for same, to ascertain whether they had any sugar on hand and were O. K. to receive same.



The following condemnations were made:

FOODS, OTHER THAN MEAT.

44 barrels grapes	24 crates peaches
7 kegs grapes	15 crates onions
24 crates grapes	104 cases soda water
92 dozen boxes grapes	1 carload lemons
125 cans tomatoes	2 lbs. candy
13 crates tomatoes	1 basket candy
126 sacks potatoes (150 lbs. ea.)	475 watermelons
7 bushels sweet potatoes	850 cases oleomargarine
80 baskets pretzels	2233 cans tomato puree

Embargo placed on 36  $\frac{1}{4}$ -gallon cans salad oil and 18  $\frac{1}{2}$ -gallon cans salad oil (adulterated).

MEAT, POULTRY AND SEA FOOD

65 turkeys	10 dozen herring
115 lbs. meat	1 carcass of Bob veal
76 lbs. chickens	100 lbs lobsters
7 lbs. poultry (geese, ducks and chickens)	32 pigs' feet
5 chucks lamb	15 lbs. shad
90 lbs. bologna	100 lbs. salmon
20 lbs. bacon	36 cottage hams
378 lbs beef	230 pork rolls

OLIVE CREAM FRENCH CASTILE SOAP.

Numerous complaints were received by this department of Olive Cream French Castile Soap, peddled by two men throughout this city.

The complainants stated that after using this soap their skin became irritated and red blotches appeared.

After considerable search these men were located and 216 boxes (each containing 4 bars of soap) were seized under the Food and Drug Act.

Upon examination of this soap it was proven to contain a large amount of free alkali, which is injurious to the skin, especially to babies, on whom castile soap is generally used.

## FREE DISTRIBUTION OF MILK

Beginning in July, our milk inspectors, instead of taking a sample of milk from the bottle at the dealer's wagon, which we believe in various instances caused contamination by exposing the nipple to the elements, purchased the whole bottle of milk and took samples from same in the laboratory.

We are fully convinced that by taking samples in this manner and delivering same to the laboratory, the temperature is as low or lower than received from the milk men when the bacteriologist takes his own sample. The sample is then taken to our laboratory at the Food and Drug Division, where chemical and sediment tests are taken from the same bottle. Where we find the milk high in bacterial count, we also look up the sediment discs at same and compare them.

After samples are taken from these bottles a considerable amount of milk is remained on hand, which was put in one quart sanitary containers and distributed to the poor (recommended to this department by the district nurses) for the price of 2 cents a quart (price of container only).

During the five months of this year that we have been doing this we have distributed from 100 to 150 quarts per month.

Respectfully submitted,

SAMUEL G. SHARWELL.

*Chief Food and Drug Inspector.*

ANNUAL REPORT

OF THE

Chemist



# ANNUAL REPORT

OF THE

## Chemist

*Department of Public Health, Newark, N. J.*

GENTLEMEN: I herewith submit my annual report for the year ending December 31, 1919:

The activities of this department have been similar to those of recent years, with an increase, however, in total volume. The larger amount of chemical work has cost the city no more money notwithstanding the increased cost of laboratory operation.

In order to economize space and condense this report only those statistics are included which would seem to be of most value for comparison and reference.

### MILK.

Total number of milks analyzed	2,175
Number of sealed samples analyzed	1,620
Number of unsealed samples analyzed .. . . .	555
Total below standard of 11.50% total solids .. . . .	64

### COMPARISONS

	1916.	1917.	1918.	1919
Number of samples analyzed .. . . .	1,468	1,413	2,093	2,175
Per cent of samples below standard	7.76	8.99	3.96	2.94
Average per cent. of total solids (over all) .. . . .	12.23	12.27	12.20	12.26
Average per cent. of fat (over all)	3.63	3.63	3.61	3.56

The figures obtained from the tabulation of the milk analyses are most gratifying. The average quality has not

only increased, but notwithstanding the larger number of samples analyzed the total number below the standard is less. The percentage number, 2.46%, is the lowest we have yet had although the figure the previous year, 3.90%, was far lower than ever before.

#### ICE CREAM.

Among the various miscellaneous food samples examined were a number of ice cream. The percentage of fat found in these varied from 5.30 to 23.00. This typical variation and the known liability to enormous bacterial counts and possible adulteration of various kinds, seem to emphasize the importance of a legal standard for ice cream.

A general standard has been desired by authorities and manufacturers alike for years. But variation in local conditions and requirements in different parts of the country have so far prevented a practical plan acceptable everywhere. Pending the formulation of such a suitable standard a number of states and municipalities have adopted their own regulations, and it would seem that our own consumers should be entitled to a standard providing at least for pasteurization and a fixed fat content.

#### MISCELLANEOUS.

There have been a larger number of miscellaneous samples than usual. While the number is not large as compared with routine milk and water samples, the amount of work involved is proportionately much greater and in some cases is difficult and time-consuming.

The following examinations are included under this heading:

- 61 samples of soda water for saccharine (10 contained it)
- 8 samples of butter.
- 15 creams.

- 28 ice creams.
- 6 citrate of magnesia.
- 3 septic tank effluents.
- 23 special milks for various purposes

Also samples of well water, cider, olive oil, coffee, sugar, ether, alcohol, whisky and material from the Police Department.

#### CITY WATER

The quality of this water is good and is favorably known and commented on by sanitarians generally. There are yearly requests for tables of analyses and those given here have been compiled from the data obtained in the examination of samples procured from three of the nine places from which samples are regularly taken. The table of averages, however, is made up from the analyses of samples taken monthly from eight different points in the watershed and one location in the city.

## ANALYSES OF NEWARK AQUEDUCT WATER

Samples from Oak Ridge Stream before junction with Clinton Stream at Newfoundland  
Parts per Million.

Date	Temperature Degrees Fahr.	Tur- bidity	Color	NITROGEN AS				Chlorine Free	Temporary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Mineral Matter
				Free	Albuminoid	Nit-	Nit-					
				Ammonia	Albumen	rates	rates					
Jan. 10	30	0.5	40	.008	.004	0	.10	4.0	22	70	25	45
Feb. 13	36	0.5	30	.004	.003	0	.15	3.5	26	64	23	41
Mar. 10	38	0.5	30	.004	.003	0	.10	3.5	24	66	17	29
Apr. 10	52	0.5	20	.044	.002	0	.125	3.5	33	50	20	36
May 10	56	0.5	40	.016	.002	0	.125	2.5	26	58	39	19
July 10	61	1.0	40	.012	.008	0	.09	3.5	21	74	20	43
Aug. 27	63	1.0	40	.026	.110	0	.125	2.5	27	64	25	39
Sept. 11	62	0.5	50	.004	.006	0	.12	2.5	23	63	17	31
Oct. 9	64	0.5	80	.016	.004	0	.125	3.5	33	82	25	57
Nov. 10	52	0.5	50	.004	.140	0	.075	2.5	27	60	31	29
Dec. 17	36	0.5	35	.028	.112	*	.15	3.5	31	76	33	43

\* Trace.



## ANALYSES OF NEWARK AQUEDUCT WATER

Samples from Clinton Stream before junction with Oak Ridge Stream at Newfoundland.  
Parts per Million.

1919	Temperature, Degrees Fahr.	Turbidity	Color	NITROGEN AS				Chloride	Temporary Hardness Calc. by	Total Solids	Loss on Ignition	Fixed Mineral Matter
				Free Ammonia	Ammonia Combined	Nitrites	Nitrates					
Jan. 15	35	0.5	20	.084	.070	*	.08	3.5	19	44	15	29
Feb. 12	35	0.5	18	.034	.048	0	.12	2.5	14	41	13	28
Mar. 31												
Apr. 2	36	1.0	20	.034	.050	0	.075	3.0	15	41	23	18
May 7	63	0.5	20	.046	.062	0	.090	2.5	15	39	15	24
June 17	57	0.5	25	.008	.060	0	.100	3.0	12	30	11	19
July 1	68	0.5	25	.010	.062	0	.075	3.0	22	37	20	41
Aug. 27	66	0.5	30	.020	.066	*	.090	3.0	18	53	23	30
Sept. 11	68	0.5	50	.034	.078	0	.085	2.5	16	37	22	15
Oct. 1	53	0.5	20	.016	.078	0	.090	3.0	8	46	17	29
Nov. 11	50	0.5	35	.040	.094	0	.075	2.5	17	43	17	26
Dec. 17	34	0.5	25	.020	.084	0	.075	2.5	11	42	13	29

\* Trace.

ANALYSES OF NEWARK AQUEDUCT WATER.  
 Samples from Laboratory Faucet, 927 Broad Street  
 Parts per Million.

1919	Tem-		Color	NITROGEN AS				Chlo- rine	Temporary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Mineral Matter
	perature, Degrees, Fabr.	Tur- bidity		Free Ammonia	Albuminoid Ammonia	NI- trates	NI- trates					
Jan. 15	37	0.5	35	.030	.064	0	.08	3.5	17	45	26	39
Feb. 13	38	0.5	25	.034	.072	0	.11	3.5	22	44	26	38
Mar.	49	0.5	30	.020	.082	0	.100	3.0	15	42	20	32
Apr. 2	48	0.5	30	.020	.082	0	.100	3.0	15	42	20	32
May	56	0.5	40	.034	.060	0	.09	3.0	17	47	18	30
June	67	0.5	30	.008	.088	0	.10	3.0	18	41	17	35
July	71	0.5	25	.016	.090	0	.07	2.5	20	43	18	30
Aug.	69	0.5	60	.023	.112	0	.09	3.0	19	43	19	40
Sept.	69	0.5	50	.016	.088	0	.085	3.0	23	45	24	31
Oct.	64	0.5	30	.016	.086	0	.090	3.0	20	46	23	38
Nov.	52	0.5	50	.012	.090	0	.110	3.5	22	40	31	29
Dec. 17	46	0.5	50	.024	.088	0	.100	3.0	20	44	20	36

## ANALYSES OF NEWARK AQUEDUCT WATER

Averages of Monthly Examinations.

Parts per Million.

1919 SOURCE OF SAMPLE	Tem- perature, Degrees, Fahr.	Tur- bidity	Color	NITROGEN AS				Chlorine	Temporary Hardness (Alkalinity)	Total Solids	Loss on Ignition	Fixed Mineral Matter
				Free Ammonia	Albumenoid Ammonia	Nitrites	Nitrates					
Oak Ridge Stream	55	0.6	30	.0275	.0900	*	.116	3.3	27.0	65.3	25.5	39.8
Clinton Stream	49	0.5	24	.0265	.0675	*	.086	2.8	15.2	43.8	18.0	25.8
Katonah Brook	50	0.6	46	.0231	.0955	*	.093	2.9	17.8	50.4	30.8	34.6
Fish Lake Stream	50	0.5	40	.0265	.0963	*	.092	3.4	15.6	56.7	21.3	35.4
Macopin Intake	42	0.5	40	.0242	.0873	0	.087	2.9	20.1	61.4	27.0	34.4
Cedar Grove Intake	53	0.6	38	.0240	.0904	0	.090	3.0	19.0	50.8	36.4	33.4
Cedar Grove Outlet	52	0.5	38	.0225	.0818	0	.098	2.9	18.5	54.8	21.3	36.5
Bevers Le Reservoir	53	0.5	37	.0215	.0865	0	.09	3.0	19.0	54.6	22.0	32.6
Laboratory Faucet	55	0.5	38	.0200	.0870	0	.092	3.0	19.0	57.0	23.0	34.0

\* Trace.

TABLE OF MAXIMUM MINIMUM AND AVERAGE TOTAL  
SOLIDS IN THE WATER FROM THE LABORATORY  
FAUCET FROM 1900 TO DATE.

(Total Solids, Grains per U. S. Gallon.)

Year	Maximum.	Minimum.	Average.
1900	2.96	1.96	2.53
1901	3.00	1.93	2.68
1902	2.92	1.98	2.45
1903	2.92	1.69	2.32
1904	2.92	2.04	2.52
1905	2.92	1.60	2.33
1906	3.24	2.44	2.71
1907	3.39	2.35	2.60
1908	2.92	2.22	2.66
1909	3.37	2.23	2.78
1910	3.50	2.16	2.81
1911	3.91.	2.63	3.06
1912	3.32	1.92	2.94
1913	3.91	2.16	3.04
1914	3.43	2.27	2.88
1915	3.90	1.92	2.99
1916	3.55	2.56	2.98
1917	3.84	2.39	3.11
1918	4.15	1.40	3.02
1919	3.78	2.74	3.32

Respectfully submitted,

HERBERT B. BALDWIN,  
*Chemist.*

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ANNUAL REPORT

OF THE

Division of Bacteriology



# ANNUAL REPORT

## OF THE

# Division of Bacteriology

*Charles V. Craster, M. D., Health Officer.*

DEAR SIR: Herewith is respectfully submitted the annual report of the Division of Bacteriology for the year ending December 31, 1919:

The records for the year show that there has been a decided increase in the number of examinations of almost every variety with which the laboratory deals, and this increase is not due to any marked increase in the conditions or diseases—except diphtheria—for which the samples are examined, but is probably due to the more general use of the laboratory by the Department of Health and by physicians.

A few of the items in which the increase is marked may illustrate the character and extent of this work:

	Total for 1919.	Total for 1918.	Increase for 1919.
Diphtheria cultures examined . . . . .	16,297	6,850	9,447
Diphtheria antitoxin distributed (doses) . . . . .	4,265	2,326	1,939
Milk examinations . . . . .	4,328	3,490	838
Specific catarrhal smears examined . . . . .	3,153	1,180	1,973

The increase in the number of diphtheria cultures, over 130 per cent as computed with the previous year, is mainly due to the system of culturing the other members of the school class when one or more scholars in the room contract diphtheria. This system has discovered a small number of

so-called bacteriologically diphtheric cases and enabled the school authorities to exclude such cases from school until negative cultures justify their return.

The incidence of diphtheria in 1919 showed an increase of 500 cases as compared with the record of 1918. The mortality from this disease, however, totaled 50 deaths, as against 79 deaths for 1918, when we had only about 12 per cent. as many cases. It is difficult to explain why the mortality varies from year to year in this manner, but the fact has often been called attention to by epidemiologists and still remains unsolved.

Of course an annual toll of 50 deaths from diphtheria in Newark at present seems to be and is greater than any one desires, but when we remember that in pre-antitoxin days, when the city was very much smaller, a mortality of 240 deaths per year from this disease was not unusual, we can realize what the liberal use of antitoxin means to the community. In fact, we may with justice lay claim to the lowest mortality of any city in what might be called the diphtheria zone.

The total number of cases of diphtheria reported in Newark during 1919 was 1,565 and the total number of deaths from the disease was 50, giving a percentage mortality of 3.19 per cent., which compares very favorably with any other city of the size in the country.

The number of cases treated with antitoxin during the year was 1,480, of which 35 died, giving a percentage mortality for antitoxin treated cases of 2.4 per cent. During the same period 79 cases of diphtheria were not treated with antitoxin, and of these 14 died, giving a percentage mortality for this class of cases of 17.6 per cent.

Regarding antitoxin production, one of the great difficulties that had to be overcome is described in the subjoined report by Dr. H. A. Tarbell of peptonol heritage, with which



we had to contend during the war, peptone being one of the most important ingredients in the culture medium used in making diphtheria toxin:

*To R. N. Connolly, M. D., Bacteriologist.*

During the period of the war, laboratories were confronted with the problem of producing diphtheria toxin with other than the standard Witte peptone broth, which heretofore had always been procurable. Our supply of Witte peptone was husbanded as long as possible, but eventually we were forced to find a substitute.

The domestic peptones were all tried out, and without specifying definitely, we were forced to admit that we could not produce diphtheria toxin of titer high enough to immunize our horses. The broth made with some of our domestic peptones would grow Loeffler bacilli with good pellicles, but on testing, after the usual eight to nine days' incubation, we would find its toxicity to be 1:20 or even lower.

After these futile attempts we were forced to attempt the manufacture of our own peptone made directly from the hog stomach by the French method of Martin, as follows:

#### PEPTONE SOLUTION—MARTIN.

The fresh stomach of six hogs are clipped free from fat, and then opened, the undigested food, etc., scraped out. The stomachs are then cut in small pieces and run through a food chopper.

We now add Acid Hydrochloric, C. P., and tap water according to the following formula:

Mixed chopped hog stomachs. . . . .	260
Acid hydrochloric, C. P. . . . .	10
Tap water (50° C.) . . . . .	1,000

This mixture is placed in a crock or glass vessel, not enamel or metal, and kept at a temperature of 50 degrees C. 20 to 24 hours. Next day the crock containing the mixture is placed over a vessel of boiling water and the temperature raised to 80 degrees C., keeping it at this temperature for five minutes to destroy excess of pepsin.

This heated mixture is rapidly filtered through cloth and cotton into another crock or glass vessel. It may be stored at this point without further sterilization. If we wish to use it at once, NaOH (sodium) solution is added until it becomes neutral to litmus paper; heated again to 70 degrees C., and an equal quantity of calcium (5 parts) to phenolphthalein in reaction at a temperature of 70 degrees C. is added.

The mixture of peptone and meat infusion is now boiled over a free flame for fifteen minutes or until it filters clear through cloth and cotton or filter paper. Adjust reaction to 5 acid, place in flasks and autoclave for thirty minutes at 15 pounds pressure. It is now ready for use.

The peptone solution may be stored in glass flasks and autoclaving for thirty minutes at 15 pounds pressure after it has been neutralized, thus insuring a stock for emergency uses.

For over two years we produced all the toxin used in immunizing our horses with broth made with this peptone solution. There are many pitfalls in its manufacture and one is not sure that a given batch of broth made in this manner will produce toxin but as a check on it stood us in good stead and we were able to keep our output of antitoxin practically up to its usual amount. There was the added enthusiasm and exultation in the manufacture of our own peptone and that we found ourselves able to produce enough toxin to satisfy our demands without the German product. Before another war can take place it is hoped that our

Government will look into the manufacture of Witte peptone, so another siege of this kind could be avoided, and we could produce our own.

Just at the close of the war a new peptone was placed on the market by a Swiss manufacturer which seems to have nearly the same toxin producing property of Witte's product and has so far been fairly reliable in our hands. We have not found it necessary to revert to the Martin process since our first trial of it. With a sugar free bouillon we have been able to produce toxin of high titer, which is absorbed readily by our horses, and has proven in every way to be satisfactory.

We wish to extend our thanks and gratitude to the executives of the New York Department of Health Laboratories for their kind assistance in extending to the writer every courtesy in offering the freedom of their laboratories and media rooms during those days of trial, when we were all sorely put to find a suitable Loeffler media for toxin production.

Respectfully submitted,

H. A. TARBELL, M. D.,  
*Assistant Bacteriologist.*

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RABIES.

This disease caused comparatively little anxiety during 1919, as it was found necessary to administer antirabic vaccine to only four exposed persons, while during the previous year it was furnished to forty three individuals who were exposed to infection.

BOTULINUS BACILLUS.

(Food Poisoning.)

Several cases of food poisoning which called for laboratory investigation were reported during the year, and speci-

mens of meat, cooked vegetables and canned material of various kinds were tested for the presence of botulinus bacilli. In one case, a boiled fresh ham that had caused an outbreak in a local institution affecting over thirty inmates, we found the meat teeming with bacilli which were identical with botulinus.

#### CITY WATER SUPPLY

The condition of the city water supply as expressed in bacterial averages found in the various samples examined during 1919 show that the claims of high bacterial purity of our supply are well founded, and the following table presents these averages for ready comparison:

Origin of Sample	Number of Exami- nations.	Average Number of Bact per cc
Oak Ridge Stream, above Clinton Stream . . .	22	405
Clinton Stream, above Oak Ridge Stream ....	22	225
Kanouse Creek, above Pequannock River .....	22	249
Echo Lake Stream, above Pequannock River . . .	22	163
Macopin Intake at Gatehouse . . . . .	22	143
Cedar Grove Reservoir, Inlet Gatehouse. . . . .	24	91
Cedar Grove Reservoir, Outlet Gatehouse. . . .	24	59
Belleville Reservoir, Inlet Gatehouse . . . . .	23	54
Belleville Reservoir, Outlet Gatehouse . . . . .	23	35
Department of Health, Plane and William Sts . .	23	31
Laboratory Faucet, City Hospital . . . . .	44	29

#### WATER FROM SWIMMING POOLS.

Frequent tests have been made throughout the year of water from the various swimming pools in the city, and the results varied from 500,000 bacteria per cc to absolutely sterile plates. The latter results show that with proper chlorination of the tanks the water can be kept in a perfectly safe and inviting condition for the users of the pools.

#### ANTHRAX IN HUMAN BEINGS.

The occurrence of cases of anthrax in and around Newark recently has given rise to some concern. This city has

such extensive industrial establishments identified with hide and leather manufacture, as well as brushes made of hair of various kinds, much of which is imported from foreign countries, that there is some cause for serious thought and necessity for laboratory investigation. The problem is a large one when we consider that in a recent shipment to one factory there were over ten thousand hides. It will be seen that if disinfection is considered necessary in such cases it will entail some new problems.

#### CITY MILK SUPPLY.

The milk supply received a large measure of attention during 1919, and it is very interesting to note the close relation between the percentage of acceptable samples of the general supply for 1919 and the same figures for 1918, which show a difference of only a very small fraction of 1 per cent.

The following detailed report prepared by Dr. G. Ward Disbrow, Assistant Bacteriologist, who has charge of this branch of the laboratory work, shows what has been done during the year:

#### BACTERIOLOGICAL MILK EXAMINATIONS

*To R. N. Connolly, M. D., Bacteriologist.*

DEAR SIR:—I herewith submit a report giving the results of the work done on milk in the laboratory during the year 1919:

All examinations of the city milk supply have been carried out as in previous years, by means of plate cultures at 37 degrees C., meat infusion agar of a reaction of 5+ being the medium used. Routine examinations for streptococci and pus have also been carried on simultaneously with the plate counts.

In addition to the routine examinations of the city milk supply, examinations of the milk supplied the City Hospital

have been made regularly throughout the year. From time to time, also, we have been called upon to examine specimens from the Municipal Milk Depots, samples of ice cream from various dealers, specimens of milk for tubercle bacilli, specimens for streptococci and various other miscellaneous tests.

In this report I have subdivided the work into groups and will present the results in each group in detail.

### 1. CITY SUPPLY.

This comprises the milk supplied the people of Newark by the various dealers. Bottles of milk are purchased by inspectors of the Food and Drugs Division of the Department of Health, numbered and brought to the laboratory. At the laboratory samples are taken and examined immediately, the results being reported by number to the Food and Drugs Division.

During the past year 2,837 samples of milk from the regular city supply were examined. Of these, 2,057 (72.50%) contained 100,000 bacteria per cc. or less, and could be said to be acceptable under the ordinance. The remainder, 780 (27.49%), contained more than 100,000 bacteria per cc. and were therefore unacceptable.

### 2. CITY HOSPITAL SUPPLY.

These samples (1,007) were taken from 40 quart cans in the ice box at the City Hospital within an hour after delivery at the institution. For a time samples were taken twice a week, but during the latter part of the year examinations were made daily (except Sunday and Monday). All reports were sent directly to Mayor Charles P. Gillen. The production and distribution of this milk was controlled by Mr. Backus.

Of the 1,007 samples examined, 609 (60.43%) could be classed as acceptable under the ordinance, and 338 (33.56%) as unacceptable.

## 3. MUNICIPAL MILK DEPOTS.

Samples from the Municipal Milk Depots were brought to the laboratory at various times by different city employees, acting under instructions from Mayor Charles P. Gillen.

The same technique was followed in these examinations as was used for the city supply and the City Hospital supply. Eighty-seven (87) samples from the Municipal Milk Depots were brought to the laboratory during the year. Of these, 69 (79.31%) contained 100,000 bacteria per cc. or less and were therefore acceptable, while 18 (20.68%) were unacceptable.

The following table shows a comparison of the results of the foregoing series of tests:

	Samples Acceptable.	Samples Unacceptable.
Samples from City Supply. ....	72.50 + %	27.49 + %
Samples from City Hospital Supply ..	66.43 + %	33.56 + %
Samples from Municipal Milk Depots ..	79.31 + %	20.68 + %

It will be noted that the supply from the Municipal Milk Depots has a higher percentage of acceptable samples than either of the other two supplies. The regular city supply ranks second and the supply for the City Hospital third.

## 4. ROUTINE EXAMINATIONS FOR STREPTOCOCCI.

Inasmuch as each sample examined for bacterial content is also examined microscopically for streptococci, 3,931 samples were thus tested. These were divided as follows: City supply, 2,837; City Hospital supply, 1,007, and Municipal Milk Depots, 87.

In the entire number examined, 102 samples were found to contain streptococci. Of these positive samples, 101 were found in the regular city supply and one in the City Hospital supply. No streptococci have been found in the samples from the Municipal Milk Depots.

Source—	No. of Samples Examined	No. of Samples Containing Streptococci.	Percentage Containing Streptococci
City Supply . . . . .	2,837	101	3.56+ %
City Hospital Supply . . . . .	1,007	1	.09+ %
Municipal Milk Supply . . . . .	87	0	.00 %
Totals . . . . .	3,931	102	2.59+ %

### 5. SPECIAL EXAMINATIONS.

Under this head are included ice cream samples, tests of bottles for sterility, samples sent in by Mr. Backus, a series from Seiler Brothers, who supplied the City Hospital before the city took it over, examinations for tubercle bacilli, examinations for diphtheria and examination of samples of milk brought to the Department of Health by persons who claimed that the milk had made them sick. There is also included a series of special examinations for streptococci made from time to time on the request of Mr. S. G. Sharwell during his investigations of pasteurizing plants.

These tests may be summarized as follows:

Tests for sterility (bottles) . . . . .	4
Samples from Mr. Backus . . . . .	19
Series from Seiler Bros . . . . .	10
Complaint samples . . . . .	2
Examinations for tubercle bacilli . . . . .	52
Examinations for diphtheria bacilli . . . . .	2
Examinations of ice cream . . . . .	55
Examinations for streptococci . . . . .	253

### 6. SUMMARY OF WORK DONE IN 1919

Examinations of regular city supply . . . . .	2,837
Examinations of City Hospital supply . . . . .	1,007
Examinations of Municipal Milk Depots . . . . .	87
Examinations for streptococci . . . . .	3,931
Miscellaneous examinations . . . . .	367

Respectfully submitted, 8,259

G. WARD DISBROW, M. D.,  
Assistant Bacteriologist.



The following presents the totals of various kinds of routine work performed at the laboratory during 1919 and contrasts the same figures for 1918:

	Total for 1919.	Total for 1918.
Diphtheria—		
No. of primary cultures examined	13,127	5,095
No. of true cases	1,099	641
Total number of cultures for diagnosis or disinfection	16,297	6,850
Diphtheria Antitoxin		
No. of doses on hand beginning of year.	48	204
No. of doses produced during the year	4,369	2,374
No. of doses distributed during the year.	4,265	2,326
Tuberculosis—		
No. of specimens of sputum examined.	2,545	2,613
No. of specimens containing tubercle bacilli	522	543
Miscellaneous—		
No. of water examinations	440	452
No. of blood examinations for typhoid and malaria	584	908
No. of doses of typhoid vaccine distributed	139	389
No. of doses of pertussis vaccine distributed	105	799
No. of milk examinations (city supply); ice cream, 55	4,328	3,490
No. of specific catarrhal infection examinations	3,153	1,180
No. of Wassermann tests (Serological Lab.)	6,976	4,073
No. of disinfection tests	521	174
Rabies—		
No. of animals examined for rabies	22	25
No. of animals found infected	3	13
No. of exposed persons given preventive treatment	4	43

Very respectfully,

R. N. CONNOLLY, M. D.,

*Bacteriologist.*

## CULTURE COLLECTORS

Following is a summary of the work performed by the two culture collectors attached to the Bacteriological Laboratory, whose duty it is to supply the culture stations with antitoxin and outfits for taking diphtheria cultures, sputums, Wassermanns, typhoid and other blood tests, collect daily all such outfits used and left at the stations by the doctors and deliver them to the laboratory, together with figures for 1918:

	1919	1918
Antitoxin delivered . . . . .	3,815	2,600
Outfits delivered—		
Cultures . . . . .	13,997	9,599
Sputums . . . . .	3,980	3,771
Typhoid . . . . .	1,185	925
Wassermanns . . . . .	5,374	3,494
Catarrhal . . . . .	3,366	1,179
Outfits collected—		
Cultures . . . . .	11,554	4,063
Sputums . . . . .	2,548	2,391
Typhoid . . . . .	397	419
Wassermanns . . . . .	3,261	2,107
Catarrhal . . . . .	2,331	867

# ANTITOXIN AND CULTURE STATIONS BY WARDS

Ward	STATION	Street and Number	Telephone No.
First	A. R. Bianchi	Seventh Avenue and Sheffield Street	1430 B. B.
First	W. R. Scudder	95 Belleville Avenue	1142 B. B.
First	Second Precinct Police	Summer and Seventh Avenues	5400 Market
Second	St. Michael's Hospital	Central Avenue and High Street	7610 Market
Second	City Dispensary . . .	Plane and William Streets	8550 Market
Second	C. Holzhauer . . .	Broad and Market Streets	1312 Market
Second	E. F. Fielding . . .	925 Broad Street	914 Mulberry
Second	G. Schreiber . . .	449 Broad Street	2742 B. B.
Second	First Precinct Police	Court and Washington Streets	5400 Market
Third	St. Barnabas Hospital	681 High Street	6616 Market
Third	Beth Israel Hospital	High and Kinney Streets	7766 Market
Fourth	Firemen's Pharmacy	Broad and Market Streets	5116 Market
Fourth	Max Lewitt . . .	Broad and Fulton Streets . . .	10071 Market
Fifth	I. M. Greenfield . . .	201 Walnut Street . . .	3908 Market
Fifth	Eckert's Pharmacy	167 Ferry Street . . .	202 Market
Fifth	Seidler's Drug Co.	21 Ferry Street . . .	8631 Market
Sixth	J. P. Smith . . .	315 South Orange Avenue . . .	1514 Mulberry
Sixth	I. L. Staehle . . .	169 South Orange Avenue . . .	1539 Market
Sixth	City Hospital	116 Fairmount Avenue . . .	9300 Market
Seventh	I. McEvan . . .	62 Springfield Avenue . . .	4633 Market
Seventh	P. J. Corrigan . . .	25 Wallace Place . . .	3205 Market
Eighth	Elwood Pharmacy	190 Washington Avenue . . .	1091 B. B.
Eighth	Oriental Pharmacy	289 Belleville Avenue . . .	453 B. B.
Eighth	H. J. Quin . . .	187 Bloomfield Avenue . . .	269 B. B.
Eighth	L. Arnold . . .	684 Mt. Prospect Avenue	4134 B. B.
Eighth	Fifth Precinct Police	Washington Avenue	5400 Market
Eighth	A. Maria . . .	346 Bloomfield Avenue	2942 B. B.
Ninth	David Bergman . .	175 Elizabeth Avenue	2472 Waverly

## ANTHROPOMETER STATIONS BY WARD

Ward	STATION	Street and Number	Telephone No.
North	Geo. Lynnett & Bro	77 Lincoln Park	3034 Mulberry
North	R. M. Lavel	71 Clinton Avenue	1337 Waverly
North	John Foster	Orange Street and Roseville Avenue	151 B. B.
North	Fifth Precinct Police	Orange and Sixth Streets	5400 Market
North	O. Scholz	114 Wilson Avenue	4343 Market
North	Bowery Pharmacy	28 Fleming Avenue	1034 Market
Twelfth	Third Precinct Police	Van Buren Street	548 Market
Thirteenth	A. Marquier	54 South Orange Avenue	2878 Mulberry
Thirteenth	A. Reusch	54 Springfield Avenue	244 Waverly
Thirteenth	Seventh Precinct Police	South Orange Avenue	5400 Market
Fourteenth	W. J. Ford	7 Belmont Avenue	2454 Waverly
Fourteenth	W. J. Ford	52 Springfield Avenue	1884 Waverly
Fourteenth	Fourth Precinct Police	Seventeenth Avenue	248 Ark.
Fourteenth	W. J. Ford	494 Springfield Avenue	248 Waverly
Fourteenth	W. J. Ford	308 Central Avenue	308 Waverly
Fourteenth	W. J. Ford	Central Avenue and B. B. Street	1884 Waverly
Seventh	W. J. Ford	531 Clinton Avenue	248 Waverly
Seventh	W. J. Ford	191 Avon Avenue	143 Waverly
Seventh	W. J. Ford	821 Clinton Avenue	2871 Waverly
Sixteenth	Sixth Precinct Police	Hunterdon and Bigelow Streets	5400 Market

## CULTURE COLLECTORS

John F. Dunn 113 South Eighth Street  
 William J. Foyle 142 Hudson Street

ANNUAL REPORT

OF THE

City Dispensary



## CLINICS

MEDICAL—Daily, 9 A. M.

DISEASES OF CHILDREN—Daily, 10 A. M.

SURGICAL—Daily, 9 A. M.

GENITO-URINARY—Monday and Thursday, 10 A. M.

DISEASES OF WOMEN—Tuesday, 3 P. M.

CYSTOSCOPIC—Wednesday, 10 A. M.

DISEASES OF SKIN—Tuesday and Friday, 9 A. M.

DISEASES OF RECTUM—Monday and Thursday, 10 A. M.

SYPHILIS—Male—Wednesday, 3 P. M.; Female, Friday, 9 A. M.

EYE, EAR, NOSE AND THROAT—Monday, 3 P. M.

NERVOUS DISEASES—Friday, 2 P. M.

ORTHOPEDIC—Tuesday, Thursday and Saturday, 9 A. M.

DENTAL—Monday, Wednesday and Friday, 1 P. M.

PRENATAL—Thursday, 3 P. M.

TUBERCULOSIS—

Monday—Children, new cases, 3 P. M.

Tuesday—Adults, 3 P. M., treatment and examination old and new cases. Children, old cases, 3 P. M. Adults, colored, 10 A. M.

Wednesday—Adults and children, throat, 3 P. M. Adults and children, colored, old and new cases, 3 P. M.

Thursday—Children, new cases, 3 P. M. Adults and children, colored, old and new cases, 3 P. M. Night clinic, adults, 6 P. M.

Friday—Adults, 3 P. M., treatment and examination old and new cases. Children, old cases, 3 P. M.

Saturday—Children, colored, 10 A. M.

ADMISSION TO SANATORIUMS—Verona, Monday, 10 A. M.;  
Soho, Thursday, 10 A. M.; Glen Gardner, Wednesday, 10 A. M.

## DISPENSARY MEDICAL STAFF

## DEPARTMENT OF SKIN, INCLUDING SYPHILIS

H. J. F. WALIHAUSER, M. D.

*Chief of Clinic Division A*

LOUIS A. KOCH, M. D.

*Chief of Clinic Division B**Assistants*

JOHN T. ENGLISH, M. D.

MARY BROAINAX, M. D.

NATHAN H. COHEN, M. D.

ERNEST KAUFMAN, M. D.

G. S. BARNETT, M. D.

ANDREW WALIHAUSER, M. D.

FRANCIS J. McCAULEY

## DENTAL DEPARTMENT

LEO J. McMANUS, D. D. S.

J. E. H. GUTHRIE, D. D. S.

## DEPARTMENT NERVOUS DISEASES

CHRISTOPHER C. BELING, M. D., *Chief of Clinic**Assistants*

AMBROSE T. DOWD, M. D.

JULIUS SOBIN, M. D.

## DEPARTMENT RECTAL DISEASES

DAVID A. KRAKER, M. D., *Chief of Clinic*

## PERINATAL DEPARTMENT

H. C. H. HEROLD, M. D., *Chief of Clinic*A. J. GORDON, M. D., *Assistant*

## GENITO URINARY AND CYSTOSCOPIC DEPARTMENT.

C. R. O'CROWLEY, M. D., *Director*H. C. POVEY, M. D., *Chief of Clinic**Assistants*

F. A. ROBERTS, M. D.

S. ROTHENBERG, M. D.

S. C. KELLER, M. D.

WILLIAM NASH, M. D.

CHARLES RICH, M. D.



## DEPARTMENT OF SURGERY

H. ROY VAN NESS, M. D., *Chief of Clinic**Assistants*

OTTO LOWITS, M. D.

J. W. GARDAM, M. D.

## DEPARTMENT OF MEDICINE

F. C. HORSFORD, M. D., *Chief of Clinic**Assistants*

PHILIP CONLON, M. D.

C. S. JANIFER, M. D.

FREDERICK A. ALLING, M. D.

G. B. EMORY, M. D.

MAX DOBRIN, M. D.

## DEPARTMENT OF TUBERCULOSIS.

M. J. FINE, M. D., *Chief of Clinic**Assistants*

SIDNEY B. RAWITZ, M. D.

ROSCOE BUCKNER, M. D.

WILLIAM GREEN, M. D.

I. WILLNER, M. D.

## DEPARTMENT EYE, EAR, NOSE AND THROAT.

WELLS P. EAGLETON, M. D., *Chief of Clinic**Assistants*

E. A. CURTIS, M. D.

H. C. BARKHORN, M. D.

## DEPARTMENT OF GYNAECOLOGY.

WILLIAM GAUCH, M. D., *Chief of Clinic*MARY E. BROADNAX, M. D., *Assistant*

## DEPARTMENT OF ORTHOPEDIC SURGERY.

CARL R. KEPPLER, M. D., *Chief of Clinic*

## PEDIATRIC DEPARTMENT.

JULIUS LEVY, M. D., *Chief of Clinic**Assistants*

HESSER G. MCBRIDE, M. D.

PAUL H. HOSP, M. D.

HERMAN NASH, M. D.

A. J. ELLIS, M. D.



# ANNUAL REPORT

OF THE

## City Dispensary

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March 1, 1920.

*Dr. Charles V. Craster, M. D., D. P. H., Health Officer.*

DEAR SIR: In presenting to the public the annual report of the City Dispensary for the year 1919 I would like to thank the clinic physicians for the efficient service rendered by them during the year, as shown by the chart on total attendance at the clinics. The number of visits from patients received at the Dispensary is about 2,000 greater than the former year.

It is of special interest to note that the increase has taken place chiefly in the clinics for Diseases of Children, Diseases of Genito Urinary Organs, Diseases of Nervous System, Tuberculosis and Dental Department.

It has been demonstrated that it is a very important adjunct in order to increase the efficiency of the children's clinic, to obtain the services of the salaried physicians of the Child Hygiene Department, as it was impossible to secure an adequate volunteer staff.

Sorry to say it became essential to discontinue the night clinics for venereal disease, which had been running nicely, due to the fact that funds appropriated by the Federal Government had been exhausted. It was generally believed that local authorities would support them, but the outlook is doubtful, owing to lack of funds in the annual budget, but we hope the financial support required will be obtained.

somewhere in order to maintain these clinics in the future to give working people, who cannot come to day clinics without a loss of wages, an opportunity to secure treatment in the evening. It seems from many standpoints very desirable.

The recent addition of a Bureau of Mental Hygiene will increase the importance of the Dispensary in serving the community as a catch-basin and distribution station for this kind of work, as well as a centre of preventative work.

The services of our District Physicians need careful consideration in view of changing conditions in our city. More than three thousand persons for the year, too poor to pay a physician and to seek to leave their homes, have been treated by them, but I would like to suggest two important changes. One is a much closer supervision of the district staff than formerly through the appointment of a medical supervisor and the replacement of an antiquated monthly report by a modern card system of medical records regularly filed and indexed.

Our service to the public has been greatly improved during the past few years and these institutions are increasing in numbers not only because of the growing cost of adequate medical service, but also because of an increased demand for better care of the public health and the recognition of the fact that well-managed out-patient clinics are economical and effective agents in treating and preventing disease.

Respectfully yours,

HENRY A. OLTMAN,  
*Apothecary.*

# TOTAL ATTENDANCE AT CITY DISPENSARY BY MONTHS AND DISEASES TREATED

CLINICS	Jan	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Prenatal	7	14	11	16	7	12	9	11	16	1	7	9	120
Medical	7	28	411	48	317	346	341	354	292	367	60	212	3,789
Surgical	429	38	41	58	57	43	49	347	337	8	10	18	4,886
Sk. & S.	107	132	144	103	94	110	100	137	138	108	93	79	1,439
Syphilis	278	3	38	182	66	81	166	226	234	5	19	202	1,691
Children	62	8	29	21	115	91	122	200	139	13	108	149	1,009
Women	1	30	3	30	42	29	51	30	59	78	31	64	29
Genito-Urinary Organs	267	234	243	230	298	211	219	35	288	21	26	246	3,013
Eye, Ear, Nose and Throat	64	2	82	66	58	130	98	117	113	9	164	17	1,146
Nervous	136	13	14	100	8	12	164	88	181	1	148	172	1,919
Tuberculosis	337	333	463	423	372	390	296	327	293	439	44	348	4,414
Dental	66	6	14	110	84	69	30	80	46	52	60	56	817
Vaccinations	18	22	16	31	390	54	25	1	91	43	15	8	582
Orthopedic	87	88	118	8	107	85	56	33	60	11	7	83	652
Rectal					17	24	19	9	22	6	10	3	112
Total treated	3,888	2,128	2,941	2,544	3,501	3,999	3,180	3,413	3,009	2,470	3,294	2,221	27,783
Clinic Prescriptions	2,851	2,437	2,988	2,716	2,904	2,546	2,617	2,609	2,742	2,837	2,883	2,497	32,339

PATIENTS SENT TO CITY HOSPITAL BY PERMITS ISSUED FROM THE CITY DISPENSARY  
FOR CITY HOSPITAL AND CITY BEDS MAINTAINED BY OTHER HOSPITALS

HOSPITALS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov.	Dec	Total
City Hospital	24	31	47	50	70	68	60	52	47	40	49	53	626
St. Michael's Hospital	5	—	—	1	4	5	6	2	7	3	3	3	52
St. James' Hospital	8	6	—	8	4	8	2	4	6	2	6	7	63
St. Augustine's Hospital	—	—	—	7	5	—	5	4	7	4	2	1	52
Newark Memorial Hospital	4	5	1	7	—	4	3	8	9	4	4	4	60
B. I. Israel Hospital	—	—	2	4	—	4	3	8	6	3	4	4	61
Women and Children's Hospital	1	—	—	1	1	—	1	—	1	1	1	—	7
Passaic Hospital	—	—	1	—	—	1	—	21	1	13	2	3	197
Passaic Day Infirmary	8	7	3	—	—	1	19	—	—	17	6	22	115
Home for Crippled Children	1	2	2	1	—	—	—	—	—	1	—	—	7
Eighth Avenue Day Nursery	—	—	—	—	—	—	—	6	—	—	—	1	6
Newark Maternity	2	—	5	2	3	1	—	—	2	—	2	1	18
Total	96	90	74	74	119	82	123	163	113	93	70	68	1,230

RECAPITULATION.

Total number patients treated	27,788
Total number prescriptions dispensed	32,339
Total number of patients sent to hospitals	1,23
Total number of vaccinations	722

## ANNUAL REPORT OF THE DISTRICT PHYSICIANS FOR 1919

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The report of the work performed by the District Physicians has been classified so as to show the types of disease which were attended during the year, the number of such visits being 3,031. The diseases treated were principally those of old age, including bronchitis and rheumatism. The physicians prescribed 1,256 prescriptions on the City Dispensary, where they are supplied free of charge.

Quite a considerable portion of the district physicians' work consisted of investigation and attendance on contagious disease cases. During the year they carried through the necessary vaccinations, assisting in the vaccination of parochial school children. In cases of diphtheria many release cultures were also taken. A glance at the chart will show the extremely varied nature of their visits.

## ANNUAL REPORT OF DISTRICT PHYSICIANS FOR 1919

DISEASE	1st District	2nd District	3rd District	4th District	5th District	6th District	Total
Chickenpox	0	0	4	0	2	0	6
Conjunctivitis	0	0	0	0	2	0	2
Measles	0	2	1	10	3	1	17
Diphtheria	2	17	8	18	10	6	61
Erysipelas	1	0	0	8	0	1	9
Croup	0	0	0	0	76	0	76
Typhoid Fever	0	1	0	0	1	0	2
Sarlat Fever	4	3	2	7	2	10	28
Diarrhoea, Diseases	4	3	0	6	55	0	68
Whooping Cough	1	0	8	4	5	18	31
Pertussis	32	0	12	25	22	11	108
Other Zymoties	3	18	10	84	118	21	244
Mumps	0	0	2	0	0	0	2
Cancer	7	4	1	0	7	0	15
Respiratory	50	3	64	72	66	2	214
Other, Chest Diseases	0	12	1	20	86	8	127
Alcoholism	2	3	1	0	2	0	8
Meningitis	5	0	0	0	0	0	5
Encephalitis	2	0	0	0	20	1	23
Other Nervous	1	4	13	24	51	10	103
Parasites	20	0	83	0	0	14	117
Stomach and Intestines	45	10	62	2	91	12	222
Diseases of Liver	0	3	0	0	26	2	32
Portals	0	0	1	1	11	4	17
Other Digestive	1	0	1	2	45	37	86
Diabetes	75	45	88	65	65	15	353
Phthisis	9	24	25	18	37	13	126
Other Respiratory	3	22	0	2	39	13	79
Organic Diseases of Heart	3	0	7	12	25	16	63
Valvular Diseases of Heart	2	0	0	15	17	10	44
Other Circulatory Diseases	2	0	0	0	23	3	28
Bright's Disease	6	8	5	3	22	7	46
Nephritis	0	0	0	1	3	0	4
Miscellaneous Urinary Diseases	1	2	1	3	29	0	36
Abnormal and Premature Birth	1	1	0	3	8	1	9
Ophthalmia	3	0	0	0	0	1	4
Infective Ophthalmia	0	0	0	0	7	0	7
Other Children's Diseases	10	15	4	2	79	6	116
Gonorrhea	4	7	9	8	12	1	41
Puerperal Diseases	0	2	0	5	5	0	12
Other Diseases of Women	8	3	6	11	38	7	73
Infertility	4	0	14	4	87	14	123
Appendicitis	1	0	1	0	0	2	4
Pericarditis	0	0	0	0	1	1	2
Ascites	3	7	21	0	8	5	54
Miscellaneous	5	0	0	0	3	36	44
Totals	379	287	475	437	1201	302	3031



## DISTRICT PHYSICIANS' PRESCRIPTIONS DISPENSED, 1919.

DISTRICTS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
First—Dr. Hill-Rothschild	15	9	10	16	7	2	1	1	5	-	7	12	85
Second—Dr. Broadnax Hosp	33	12	20	24	11	16	8	9	16	5	13	10	177
Third—Dr. Roderman	28	22	26	17	18	8	4	15	18	4	7	16	168
Fourth—Dr. Kaufman	39	47	23	48	18	10	17	19	15	22	19	47	318
Fifth—Dr. Coffey	37	26	43	62	47	16	14	18	7	17	25	19	321
Sixth—Dr. Jedel	24	27	13	13	19	11	21	15	18	15	13	3	187
Total	176	143	125	165	115	58	65	76	69	63	84	107	1,256

During the year Dr. Hirschberg and Dr. Broadnax resigned their positions. Dr. Hill, on account of illness, was granted a leave of absence.

Dr. Hosp was appointed temporarily in the second district.

Dr. Jedel returned from Government service and resumed his work in the sixth district.

ANNUAL REPORT OF THE PAROCHIAL  
SCHOOL NURSES FOR 1919

The medical inspection of children in parochial schools continued to increase in value and routine during the past year. The chart contained in this report gives an idea of the activities of the work of the six nurses. Of particular value is the medical control of contagious disease, thus preventing further exposure of associated children. Invaluable work has also been done by means of rectifying many forms of physical disability. School children are examined and inspected by the nurses and upon discovery of defects of any kind are recommended to their parents for special treatment, either at the City Dispensary, where special clinics are maintained, or by the family physician or dentist. Without this manner of care countless defects would be neglected or unobserved by parents, with baneful effects in the future.

The nose and throat defects during the year were 1,650. Various children's eyes were operated on at the City Hospital and the Eye and Ear Infirmary. For the purpose of a survey an examination was carried out during the year in one of the smaller schools for the purpose of ascertaining the proportion of tuberculosis in children. Dr. Fine, Chief of the Tuberculosis Bureau personally examined all the pupils, with the result that 25 per cent. were found to be suffering from some stage of tuberculosis. These children were placed under the supervision of the divisional nurses and steps taken to improve living conditions and the treatment in the school.

The investigation of other schools will be carried through as opportunity permits. There is no doubt a very great need for the adoption of open-air classrooms in the parochial

schools. Such classrooms could be located in convenient schools and the various papers requiring such treatment sent to one central point.

There has been considerable congestion in the schools during the year, due to the increase in population. The school nurses' work has shown how valuable is the social follow up of the family. It was due to their efforts that a Citizens' committee was formed for the emergency relief of children in all schools requiring shoes and clothing. This committee functioned with the Board of Education through the Attendance Department of the public schools and supplied shoes, stockings, storm rubbers and clothing when nurses certified to the need. These articles were also secured at low cost for those who could pay. With the co-operation of the Catholic Boys' Protective, shoes were secured at cost, and in many cases on deferred payments.

A start has been made in the education of children in the simple principles of public health. The classroom talks have been extended to include as far as possible actual demonstration of these principles. Personal hygiene and cleanliness has been especially dwelt upon. To demonstrate care of teeth the nurses used extra large false sets of teeth and correspondingly large tooth brushes. In this work tooth brush drills were held and during the year many dozen brushes were sold for a few cents apiece to the children who would never otherwise have secured them.

Classes of children have been brought to our auditorium and shown moving pictures on health subjects, such as tuberculosis, etc. We have found that the children take away from the motion pictures a lasting impression of health work. We are endeavoring to bring about a perfect scheme of education along these lines.

The year has been extremely unusual from the point of view of the prevalence of diphtheria. The work of the

nurses has been of great help in the follow-up of diphtheria in the schools. Where a case of disease occurs in a classroom, the teachers and nurses of every child is swabbed, and in this way many carrier cases were discovered.

The nurses have taken a prominent part in social service activities and have attended conferences of the State Health Nurses' Association.

CHART SHOWING ACTIVITIES OF SCHOOL NURSES.

SCHOOL	Visits to School	Excluded	Teeth Defective	Eye and Ear Defective	Nose and Throat Defective	Mental Defection	Contagion	Vermín	Unclean	Vaccinations Secured	Skin Affections	School Treatments	Dispensary Calls	Class Talks	Class Inspections	Re-inspections	Physical Examinations	Cultures to Laboratory	Home Calls
St. Casmer	89	21	434	69	50	0	10	234	40	182	294	367	15	132	134	649	230	255	68
St. James	100	86	427	103	81	0	3	270	109	143	256	684	19	187	199	766	323	321	159
St. Benedict	82	47	398	70	53	0	1	122	193	92	339	590	12	165	180	761	239	80	106
St. Mary Magdalene	40	7	81	3	0	0	0	13	29	18	61	90	6	60	74	140	64	0	48
Sacred Heart	74	4	117	15	66	0	5	33	35	17	25	195	29	129	120	133	190	183	44
St. Ansgar's	69	29	386	80	73	0	0	164	124	85	190	301	20	170	167	301	169	49	113
St. Mary's	86	80	106	46	62	0	6	59	4	37	47	153	8	103	53	278	43	302	26
St. Philip's	63	21	34	58	44	0	8	37	13	40	53	181	10	80	45	289	60	1	44
St. John's	73	50	139	55	61	2	0	141	41	29	79	216	5	94	69	273	103	3	72
Our Lady of Mt. Carmel	73	25	194	36	42	0	16	71	45	84	141	143	30	106	99	221	40	10	27
Sacred Heart	91	46	74	26	44	2	8	144	88	25	17	461	21	153	165	662	36	0	86
St. Michael's	40	71	270	59	80	1	14	346	77	109	20	604	69	212	247	962	146	0	109
St. Peter's	100	17	39	77	59	0	6	70	210	63	13	561	254	307	409	442	206	49	141
St. Stanislaus	108	50	431	93	94	0	27	300	248	38	31	6	343	472	498	718	89	106	132
St. Mary's	91	158	122	49	36	0	25	280	14	16	8	879	84	27	234	767	27	63	179
St. Rose of Lima	89	69	146	69	65	1	15	225	33	111	13	776	53	366	339	503	142	175	100
St. Ann's	91	34	241	62	91	2	98	138	19	74	78	366	90	288	298	371	103	6	100
St. Joseph's	73	23	108	30	64	0	3	133	78	90	50	183	15	147	144	247	58	2	46
St. Columban's	121	81	345	87	91	6	32	131	292	62	76	487	22	361	413	624	44	270	106
St. Benedict's	83	86	117	54	57	0	8	71	11	4	66	160	17	133	69	287	15	15	51
St. Vincent's	106	36	123	13	49	0	7	113	70	117	49	280	39	141	146	192	94	0	77
St. Joseph's	117	66	267	58	101	0	66	161	169	376	87	624	72	214	309	318	157	120	137
St. Patrick's	89	35	294	76	61	4	3	171	80	116	51	413	49	164	114	742	96	7	72
St. Anthony's	80	41	160	41	76	3	54	227	178	108	84	397	30	170	22	334	104	160	123
St. Charles	70	36	141	61	66	0	14	139	80	90	71	432	14	127	196	247	97	49	96
Our Lady of Good Counsel	80	61	129	44	56	0	19	135	50	43	31	502	32	130	195	684	87	71	32
Totals	2967	1902	2068	1476	1650	21	277	3708	2273	2327	2208	10460	1583	4872	4051	12,311	2927	2237	2237

## BUREAU OF VENEREAL DISEASE

*Dr. C. V. Craster, Health Officer.*

DEAR SIR:—I hereby submit the annual report of the Venereal Disease Bureau:

By reason of the great lesson taught by the experience of the Medical Departments of the Army and Navy in the handling of large numbers of men during the late war, considerable attention has been given to the question of venereal diseases throughout the country. This lesson shows in no uncertain figures the value and possibilities of venereal disease prevention. We have taken this experience and applied it in modified form to the conditions found in civil life. The work is still in its very beginning, is but commencing to take on a definite form, but the results already obtained most certainly justify confidence. It is perhaps a little soon to permit the actual estimation in figures of the results obtained, for the results are necessarily dependent upon public opinion.

The particular feature most stressed this year by the Bureau was publicity. Working with the co-operation of the United States Public Health Service and the State Bureau of Venereal Disease Control, we have employed every means at our disposal in opening up the subject of sex education, including venereal diseases. We have endeavored to place these delicate subjects before the public in a manner calculated to arouse interest with as little antagonism as possible. Posters and signs have been placed in public places advertising the dangers of venereal disease and the location of the clinics devoted to treatment of these diseases, in much the same way that smallpox and other contagious diseases were advertised. In addition, illustrated lectures were given to the employees of large concerns, pamphlets and literature on the subject were distributed. "The End of

the Road," a moving picture, accompanied by a lecture, was shown to selected audiences. Generally speaking, we feel that a definite opening has been made in the veil of false modesty, darkness and ignorance which have from time immemorial surrounded the entire subject of sex.

The clinics for gonorrhea and syphilis have shown an advance in scientific accomplishment, as well as in numbers treated. The genito-urinary clinic at the present time has a staff of nine assistants, has added special individual treatment booths, new instruments and a collection of charts taken from foreign medical publications. A special attempt is made to offer clinical instruction to private physicians desiring the same. The syphilis clinic has devoted special attention to the treatment of early cases of neurosyphilis. The night clinics, which ran for a few months, had to be discontinued by reason of withdrawal of supporting funds by the Federal Government, although they were very well attended and were doing excellent work. It is hoped that these clinics will be re-opened in the near future. The decline in the number of cases reported by private physicians shows the necessity for a consideration of the subject. It has been made a matter for discussion at the meeting of the State Medical Society to be held in June, 1920, where it is expected that something will be found to meet our needs.

Police co-operation has been of the most active and beneficial sort. All persons arrested for sex crimes have been examined for syphilis and gonorrhea and such cases as were found to be positive were offered treatment. Efforts are constantly made by the officers of the Vice Squad, the social workers of the Women's Court and this Bureau in reclamation.

It is perhaps too soon to be able to estimate the actual amount of progress made in the operation of the Bureau of Venereal Disease, for as is stated above the most work was

done in opening the question of sex hygiene, sex education and the venereal diseases to the public.

Judging from statements made by individual social workers, social workers employed by large concerns and personal interviews with members of the general public, the results of this, the very beginning of the work of publicity are certain. It is a most important question, reaching as it does into the very structure of our social system. The pathway has been found and the course laid out, we shall carry on the work begun last year to a definite conclusion.

#### RECORD OF CASES, 1914-1920.

From 1914 to 1919 the following positive cases of syphilis were known to exist in the city, as shown by Wassermann tests reported from the City Serological Laboratory:

POSITIVE WASSERMANN'S.	
1914	722
1915	808
1916	1,009
1917	643
1918	617
1919	559

Similarly the laboratory tests for the gonococcus gave positive results from 1915 to 1919:

POSITIVE FOR GONOCOCCUS	
1915-1916	235
1917	262
1918	232
1919	410

Since the ordinance requiring the reporting of venereal disease came into effect in July, 1918, the reported cases were as follows:



## JULY, 1918-1919.

Syphilis .....	505
Gonorrhea .....	639
Chancroid .....	27

## JULY, 1919-JUNE, 1920.

Syphilis .....	271
Gonorrhea .....	339
Chancroid .....	13

## VENEREAL DISEASE IN PRISONERS.

The examination of persons arrested by the police on charges of sex crime between June, 1919, up to and including May, 1920, gives the following results:

	Male.	Female.
Number Examined .....	238	433
Syphilis .....	2	53
Gonorrhea .....	16	12

The above tabulation of results must not be taken as a true indication of the prevalence of syphilis and gonorrhea among these persons, as positive laboratory findings were alone taken as a criterion of the existence of disease. The percentage of positive cases is undoubtedly much larger.

During the year 1919 there was an increase in the number of patients attending the genito-urinary and syphilis clinics

## NEW ADMISSIONS.

	Male.	Female.
Syphilis .....	190	118
Gonorrhea .....	390	20
Chancroid .....	10	0
Balanitis gangrenosa .....	4	0
Other venereal infections.....	22	2
Total admissions to clinics.....	616	140

## NUMBER PATIENTS DISCHARGED.

	Male.	Female.
As cured .....	21	13
As probably cured .....	2	0
Non-infectious, but not cured .....	6	5

## NUMBER PATIENTS DISCONTINUING TREATMENT.

	Male.	Female.
With permission .....	91	52
Without permission .....	0	0
Total number of cases of disease treated during year .....		3,494
Total number treatments administered (including neo-salvarsan) .....		7,138
Number of Wassermann tests .....		6,809
Number of microscopic examinations for treponema pallidum .....		29
Number of microscopic examinations for the gonococcus .....		3,197
Average daily attendance .....		350

Respectfully submitted,

H. J. F. WALLHAUSER, M. D.,  
*Director Bureau of Venereal Diseases.*

ANNUAL REPORT

OF THE

Division of Tuberculosis



ANNUAL REPORT

OF THE

Division of Tuberculosis

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January 1, 1920.

*Dr. Charles V. Craster, Department of Health, Newark,  
New Jersey.*

DEAR SIR:—I herewith present the report of the Tuberculosis Division for the year 1919. This covers the work accomplished through the clinics, nurses and general field activities.

The attached tabulations show an increase in the clinic attendance of 750 over that of the previous year, although there were fewer cases reported and fewer deaths.

Early in the year 1919 the Department of Health took over all the nurses of the Anti-Tuberculosis Association of this city, so that now all the tuberculosis visiting and follow-up work in the city is under the direct control of the Division of Tuberculosis.

We made an examination of the boys in the Newark City Home and as a result found that 20 per cent were suffering from tuberculosis. After a conference with the Health Officer, it was decided that if a nurse were placed in charge of the boys who were ill, their health would gradually improve under proper supervision, as the climate and surrounding conditions were ideal. Consequently, a nurse from our staff was appointed and is now in charge of the tuberculosis ward of the City Home. Since that time a great improvement has been noticed in the health of the boys.

A night clinic in the Department Building for those patients who find it impossible to attend during the daytime was opened in May, 1919, and the attendance is very gratifying. A back survey was conducted by the nurses in the first and fourteenth wards of the city during the year and many suspected cases were discovered, which upon examination proved to be positive tuberculosis cases. As a result of this survey a health centre was opened at 68 Garside Street for the patients of that neighborhood where clinics are held every Saturday morning and are well attended. In the fourteenth ward 127 cases were referred to the various clinics in the Dispensary.

We are indeed grateful to the Red Cross for the hearty co-operation we have always received from their organization and greatly appreciate the ambulance they donated to our Bureau, which we use in bringing children to and from the clinic, where we serve milk and crackers to them. Many of them would otherwise fail to attend clinic, due to the distance and lack of carfare. The ambulance is also used for forcible removal of careless tuberculous cases, as well as emergency cases to the hospitals and sanatoria.

Through the assistance of the Anti-Tuberculosis Association of this city, the Bureau has conducted lectures and shown lantern slides on tuberculosis during the noon hour at various factories throughout the city. The attendance has been approximately 3,000 and results have been very pleasing, as many new cases of tuberculosis have been discovered, some of the men requesting examinations after the lectures and a great number visiting their private physicians in order to be examined.

A course in vocational training was opened by the Bureau for patients, or wives of patients, who were anxious to earn sufficient money for necessities. Many of them were taught how to make lamp shades, mats and basket work by one of the nurses of the Bureau who had made a study of this

particular line of work. Some of the tent and bed-ridden patients were also taught vocational work, which I believe tends to relieve the mind and act as a therapeutic agent. In addition, employment was obtained for eleven other patients through the co-operation of the Municipal Employment Bureau.

Through donations received from J. Bamberger and from Hahne & Co., which we greatly appreciate, the Bureau was able to purchase ten tents for patients, who did not wish to go to sanatoria and were anxious to take the treatment at home. Five of these tents have been equipped with cots, blankets, invalid chairs and tables, furnished by the Department. The patients are all doing well and have been sleeping outdoors the greater part of the winter.

During the year many private agencies sent clothing and shoes to the Bureau for distribution among indigent patients, and in this way a number of those who otherwise could not attend the clinic for want of shoes have been able to do so.

Many of our patients who found it impossible for them to continue the purchasing of fruit, owing to the high prices, asked the Bureau to intercede, and a meeting was called by the Health Officer with several fruit dealers of the city, who agreed to honor cards presented by the Bureau and to sell fruit at cost to the bearer of such cards.

Arrangements were also made with the Food and Drug Department for the distribution of milk to patients who cannot afford to buy same, and the only charge is the purchase of the container. As this milk is obtained from samples there is no additional cost to the Department for same.

#### CONTEMPLATED ACTIVITIES.

During the coming year the Bureau contemplates the opening of a clinic in the fourteenth ward as a result of the survey conducted during the past year, as well as the opening

of a diagnostic clinic in the Urban League for colored patients. This matter was taken up some time ago with the committee members of the League and acted upon favorably, so that we expect to open the clinic in the near future. A clinic in the fifth ward is also under consideration.

Respectfully submitted,

M. J. FINE, M. D.,  
*Director Tuberculosis Bureau.*



OCCUPATIONS OF TUBERCULOSIS PATIENTS FOR  
YEAR 1919.

Housework .....	216	Toolmakers . . . . .	16
Laborers .....	188	Bartenders . . . . .	16
Factory hands .....	169	Porters .....	14
Clerks and typists .....	93	Dyesetters .....	12
Hatters .....	54	Salesmen .....	12
Machinists .....	49	Steel workers .....	11
Leather workers .....	48	Engravers .....	10
Painters .....	41	Motormen .....	9
Barbers .....	39	Brakemen .....	9
Tailors .....	36	Foremen .....	9
Carpenters .....	33	School teachers .....	8
Cigarmakers .....	31	Chauffeurs .....	8
Bakers .....	26	Roofers .....	6
Waiters .....	25	Butchers .....	6
Engineers .....	24	Watchmen .....	6
Cooks .....	22	Policemen .....	6
Jewelers .....	21	Milliners .....	4
Peddlers .....	21	Stone setters .....	4
Polishers .....	19	Firemen .....	3
Conductors .....	19	Dressmakers .....	2
Plumbers .....	19	Druggists .....	2
Electricians .....	18	Chemists .....	2
Cutlery workers .....	18	Lawyers .....	2
Printers .....	17	Musician .....	1
Saleswomen .....	17	Nurse .....	1
Dishwashers .....	17	Real estate dealer. ....	1

## TUBERCULOSIS CASES FOR YEAR 1919

Total number of cases reported	1,869
Total number of deaths	637
Total number of patients visited by department	15,439
Total number of active cases	1,117
Total number of patients examined at clinics	4,474
Total number of children examined at clinics	1,803
Total number of colored examined at clinics	1,036
Total number examined at night clinic	167
Total number examined at Garside clinic	243
Total number examined at adults' clinic	1,225
Total number examined at Verona clinic	240
Total number examined at Glen Gardner clinic	445
Total number examined at Soho clinic	171

## REFERRED TO OTHER DEPARTMENTS FOR ATTENTION.

Medical clinic	258
Disinfecting Department	967
Sanitary Department	78
Child Hygiene	9
Mental Hygiene	7
Food and Drug	7
Bureau of Associated Charities	45
Overseer of the Poor	33
Widow's Pension	19
Children's Aid Society	4
Visiting Nurses' Association	2
Home for Crippled Children	3
Open Air School	207
Employment Bureau	11

TUBERCULOSIS CASES REPORTED DURING YEAR 1919. MONTHLY, BY SEX, COLOR, AGE.

MONTH	Male	Female	White	Black	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 to 84	Total
January	106	81	174	13	2	6	12	13	12	29	40	44	21	8			187
February	81	54	123	12	1	5	9	13	11	15	38	17	14	8	3	1	135
March	102	54	142	14	—	6	5	6	8	21	30	42	22	5	5	..	156
April	105	55	154	6	—	3	10	15	15	16	20	31	21	15	4	1	160
May	86	83	142	27	1	6	6	16	14	24	46	30	19	5	2	..	169
June	90	51	180	11	—	6	5	12	16	18	36	21	21	6	..		141
July	94	71	146	19	1	6	9	20	17	25	41	29	15	2			165
August	131	75	198	18	1	5	16	21	14	23	57	39	18	8	4		206
September	80	49	123	13	1	3	8	10	11	21	31	31	19	8	1		135
October	100	65	146	19	—	7	12	16	20	21	42	28	13	6	1		165
November	90	60	186	14	—	5	13	22	29	25	35	7	8	6	..		150
December	82	48	116	14	—	4	8	8	22	19	23	20	13	8			130
Total	1153	746	1719	160	7	69	113	172	189	257	454	339	199	85	20	2	1890

## TUBERCULOSIS CASES REPORTED DURING 1919 BY WARDS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
176	174	212	99	193	80	117	94	92	62	64	92	156	215	97	78	1,899

## TUBERCULOSIS DEATHS REPORTED DURING YEAR 1919 BY WARDS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Non Res.	Total
39	46	57	40	35	26	38	28	39	29	36	49	54	53	39	25	16	637

ANNUAL REPORT

OF THE

Division of Child Hygiene



# ANNUAL REPORT

1920

OF THE

## Division of Child Hygiene

*Dr. C. V. Craster, Health Officer.*

DEAR SIR: I hereby submit my report for the year 1919.

The infant mortality rate in Newark in 1919 was 76.2. A comparison with previous years shows that the infant mortality rate is still going down and that 1919 presents the lowest infant mortality rate in the history of the city. That the rate in 1919 was lower than in previous years was partly due to the absence of epidemics of measles and whooping cough, which in previous years have caused a greater number of deaths in infants and a more severe attack than all other contagious diseases combined. The sharp reduction from 1918 is partly explained by the absence of influenza, which has caused so many puerperal deaths and premature births.

Nineteen nineteen was, in fact, a banner year for the babies throughout the United States, as there was very little contagious disease and a comparatively mild summer. What has been accomplished through child hygiene work can only be estimated by making a comparison with other cities. Newark has one of the lowest infant mortality rates in the United States, ranking fourth among the fourteen largest cities and first among the larger Eastern industrial cities. If Los Angeles and San Francisco are omitted from the table, on account of the marked difference in climatic and industrial conditions, Newark is surpassed only by St. Louis by one point.

A study of the causes of death under one year will show that there has been a reduction in the past few years in the deaths grouped under congenital debility, etc. It has been claimed that methods heretofore employed in preventive child hygiene effect this group very little and that results can only be obtained through the establishment of maternity centers, clal-rate systems of obstetrical out patient departments, and costly maternity hospitals. It would appear that in Newark these results have been obtained through the regulation and supervision of midwives and the prompt visiting of new-born babies by the teachers of infant hygiene, supplemented by a rather simple prenatal supervision.

Perhaps the most convincing evidence of the value of preventive child hygiene work is found in a study of the death rates for mothers and infants supervised by the department in comparison with the death rates for the city as a whole.

#### 1919 INFANT MORTALITY RATE

A. Deaths under one year per 1,000 births—	
1. For entire city .....	76.2
2. For infants supervised by Division .....	37.0
B. Deaths under one month per 1,000 births -	
1. For entire city .....	33.1
2. For infants of mothers who received prenatal care from Division .....	19.1
C. Still-births per 1,000 living births -	
1. For entire city .....	42.0
2. For infants of mothers who received prenatal care from Division .....	25.4
D. Puerperal deaths per 1,000 deliveries—	
1. For entire city .....	4.9
2. For mothers who received prenatal care from Division .....	2.1



Infant Mortality Rates of the 14 Largest Cities in the United States, 1919

Los Angeles		66.7
San Francisco		68.3
St. Louis		75.2
NEWARK		76.2
Cleveland		81.3
New York City		82.0
Manhattan		87.0
Philadelphia		88.9
Boston		96.5
Detroit		96.8
Baltimore		97.0
Milwaukee		97.5
Chicago		102.7
Pittsburgh		105.0
Buffalo		109.9

The death rates for still-births, infants under one year, infants under one month and mothers receiving out-patient mothers and babies that received supervision from the Child Hygiene Department, has been approximately one-half of that of the city. Since the Department selects the mothers that live in the most congested and the poorest sections of the city and that are delivered by midwives or in the wards of hospitals, it can hardly be said that the social, sanitary, housing and economic conditions are such that should make for a lower death rate.

The Department has carried on its work with an appropriation that is small in comparison with the money spent by many other cities and with salaries that when we consider the depreciated value of the dollar, are inadequate to enable the Department to maintain a full force of the proper character. When these two conditions have been corrected it should be possible to bring the infant mortality rate of the entire city below 50 per 1,000 births, a rate that several years ago was presented as an ideal that we were working for but probably could not approach for many years to come.

The special features of the Child Hygiene Division, as it has been developed in Newark, may be summarized as follows:

(1) The Department, from the very beginning, has devoted itself strictly to preventive child hygiene, it has not dissipated its money or its energy on the treatment of sick children. This policy was determined by the conviction that the deaths from rubeolism, diphtheria, scarlet fever, diarrhea, bronchitis and even from contagious diseases like measles or whooping cough were frequently determined by the general condition of the infant, by the nutrition which could be determined by the maintenance of maternal nursing and proper infant hygiene. Prevention through education has been the sole purpose of the work. Cure through treatment has been considered the function of doctors. Expen-

saries and hospitals. The cardinal hygienic "motto" has been to make "Growth more perfect, health more vigorous."

(2) The Department has followed intensive rather than extensive methods in its work. While the city's appropriation does not permit the same visitation of all the families in the city, certain wards and certain groups have been selected for special concentration. The nurses have devoted themselves to as many new born babies as they can properly care for and to more. For this purpose a definite district, determined by the number of births per year, was assigned to each nurse, as in this way a greater number of babies would be looked after and kept well.

Special attention during the past year has been given to the colored babies and those of the unmarried mothers, as in these two groups the mortality rate is ordinarily two or three times as high as in the city as a whole. The infant mortality rates for the colored infants for three years for the entire city were:

1917	184.9
1918	198.9
1919	174.3

The infant mortality rates for illegitimate infants were:

1917	112.7
1919	43.7

During 1919 all illegitimate infants born in hospitals were supervised by this Department.

(3) The extension and popularization of maternal nursing has been made the fundamental basis of the work from the very beginning. The city has never maintained a "milk station" nor distributed milk to mothers or infants. Of 15,000 babies supervised, more than 95 per cent have been partly breast-fed six months and 88 per cent have been entirely breast-fed six months.

To carry out this purpose it has been necessary to obtain the assistance of social service agencies and to arrange for wet nurses and to distribute pumped breast milk.

(4) The keeping of mothers and infants together has been stressed under all circumstances and with all institutions and agencies, so that it is probably true that there are fewer foundlings, fewer dependent infants and fewer motherless infants in Newark than in most cities. This has been made possible through the active co-operation of hospitals, day nurseries, Children's Aid Societies, and organizations interested in unmarried mothers, and more especially by the fact that the Department has undertaken the supervision of all unmarried mothers delivered in the hospitals of Newark and supervises and controls the boarding out of babies.

Infants who have in previous years or in other cities on account of sickness or dependency been put in infant asylums, baby hospitals, baby farms or day nurseries, have in a considerable number of instances been kept at home with their nursing mothers or at the Convalescent Home for Nursing Mothers or been placed in boarding homes with foster mothers.

Infants do not thrive in institutions, no matter how immaculate; they do thrive with "mothering" in spite of the dirty home or the crowded tenement house.

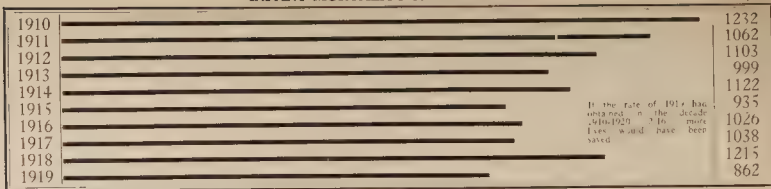
The supervision of the boarding out of infants has considerably reduced the number that were boarded out and obtained good care for those who were placed in foster homes.

The Convalescent Home for Nursing Mothers was opened at Ivy Hill in September, 1919. It has been very successfully serving the purpose for which it was intended, that is, a home where mothers can remain for a variable period of time to enable them to regain strength and to nurse their babies.

# NEWARK

## \* INFANT MORTALITY RATES 1910-1919

Total  
Deaths  
under  
one year



\* Deaths under one year per 1,000 living births.

## Deaths Under One Year For 1919 as Compared With the Same Period of 1918-1917 by Causes

	Measles	Bronchitis	Pneumonia	Diarrhoea	Other Contagious Diseases	Early Infancy Congenital Debility Prematurity	Meningitis	All Others
1917	0	72	121	250	50	430	26	86
1918	33	84	156	273	83	442	30	112
1919	2	42	87	244	27	345	24	90

While at the Home the mothers have received instruction in personal hygiene, care and feeding of babies and children, cooking and housekeeping. As opportunity offers it is an intention to give every girl the special training needed to develop the vocation for which she seems best fitted.

The mothers in the Home have also wet-nursed young infants who were either in a precarious condition or had to be separated from their mothers and placed out. The Home has assisted a number of agencies in this way and has undoubtedly been instrumental in saving the babies' lives.

During this period seventeen mothers have entered the Home, and in addition to taking care of their own babies have wet-nursed three babies.

(5) The supervision and regulation of midwives has been continued. It is our opinion is one of the most important factors in the results that have been obtained. The primary purpose of this supervision has been to restrict the practice of midwives to normal cases, to teach them the importance of sending promptly for doctors whenever any abnormal conditions arise and to inculcate in them a proper understanding and regard for the principles of asepsis. The regulation of midwives is secondary only to the teaching of mothers by personal contact.

While the infant mortality rate for 1919 and the rank New York occupies in the line of the very gratifying, the results should only stir us to greater effort, for it is to be remembered that when "Growth is made more perfect, Decay less rapid," and babies are more vigorous and Death more remote, and that preventive Child Hygiene work is the very basis of public health.

Respectfully submitted,

JULIUS LEVY, M. D.,  
Chief Child Hygiene Division.

ANNUAL REPORT

OF THE

Mental Hygiene Bureau





## ANNUAL REPORT

OF THE

# Mental Hygiene Bureau

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*Dr. Charles V. Craster, Health Officer.*

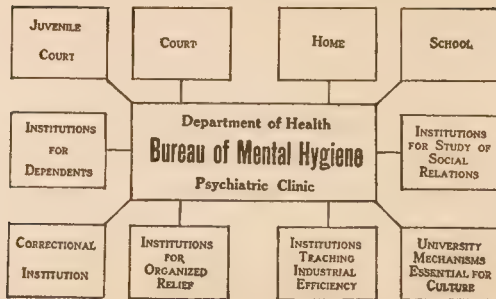
DEAR SIR: I hereby submit the report of the Mental Hygiene Bureau for the year 1919.

On June 1, 1919, a Bureau of Mental Hygiene was established in the Department of Health, in recognition of the fact that mental hygiene is fundamentally a health activity which should be carried on alongside of child welfare, prevention and control of tuberculosis and venereal disease.

The development of mental hygiene has long been fostered by Dr. Thomas W. Salmon, Medical Director of the National Committee of Mental Hygiene. Through his efforts that committee provided us with funds for the part-time employment for one year of a psychiatrist to examine the juvenile cases in the Essex County Parental School and for the services of a trained psychiatric social worker for one year. Dr. Ambrose P. Dowd, resident physician at the City Hospital, has carried out such examinations during the past six months, he being a well-equipped psychiatrist. He has also assisted the Director in various other activities of the Bureau.

The general plan of organization of the Bureau was patterned after the following chart, which was adopted from Dr. Stewart Paton's plan, published in *Mental Hygiene*, July, 1917:

## GENERAL PLAN OF ORGANIZATION



Adapted from Dr. Stewart Paton's Plan, *Mental Hygiene*, July, 1917

Among the activities of the Bureau will be the care and treatment of mental disorders and maladjustments of behavior, the examination of juvenile offenders referred by the Children's Court, the mental rehabilitation of discharged soldiers, the examination of mental cases from the Civil Hygiene and Venereal Disease Boards, the collection of statistics as to the number of feeble-minded, epileptics and idiots in the community, and the spreading of practical knowledge of preventive measures.

Our work has been largely educational and experimental. We were also fortunate in securing Miss Beatrice Gosling as our social worker. The social service department has been actively developed and is growing so rapidly that it is necessary to add more workers to our staff. Funds are needed for this work.

The problem of drug addiction has also been taken up by the Bureau. Efforts were made to have a law passed in the Legislature for the commitment of drug addicts, but this law failed of passage. A number of addicts were induced to accept treatment voluntarily at the Essex County Hospital, but our experience shows that such admission to institutions is unsatisfactory because they easily become dissatisfied and leave before a cure is completed. Because of this condition and the continued increase of drug addiction, it is urgent that further efforts be made to enact legislation allowing legal commitment of drug habitues.

We have only made a start in mental hygiene. The work is vitally important and urgent, and the field is immense. The first four months were taken up with organization of the Bureau, the actual social service work beginning October 1st. A summary of the work during the months of October, November and December follows:

Total number of cases referred	113
Soldiers	27
Relatives of soldiers	3
Adults (civilians)	48
Juveniles	35
Service Rendered -	
Institutional care	13
Suitable employment obtained	1
Convalescent care	1
Commitment papers filed	6

## Service Rendered by Means of—

Interviews	95
Histories obtained	79
Home calls	51
Reference visits	136
Telephone references	190
Clinic and office calls	169

## Sources of Cases Referred

American Red Cross	15
U. S. P. H. S.	9
Newark Technical School	1
Judge Osborne	6
School nurses and teachers	6
Psychological Clinic	3
Lawrence	12
Penitentiary Warden	1
Police Department	1
Personal application	4
Hospitals	29
Divisions of Health Department	2
Neighbors	12
Bureau of Associated Charities	2
Children's Aid	4
Church Mission of Help	1
United Hebrew Charities	2
Italian Church Mission	1
Negro Welfare League	2
Out-of-town organizations	

Respectfully submitted,

CHRISTOPHER C. BELING, M. D.,

*Director, Mental Hygiene Bureau.*

## Special Tables of Vital Statistics



*Dr. Charles V. Craster, Health Officer.*

DEAR SIR — I hereby submit the Vital Statistics for 1919:

Death rate per 1,000 population.....	12.6
Birth rate per 1,000 population.....	25.7
Deaths under one year per 1,000 births.....	76.2

Respectfully submitted,

ELBERT S. BALL,  
*Clerk in Charge of Vital Statistics.*

# MORALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR FOR THE YEAR 1918

CAUSES	All Colors	White	Colored	Male	Female	Under 15	15 and over	Under 15	15 and over	Under 15	15 and over	Under 15	15 and over	Under 15	15 and over
Infantile Paralysis	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Typhoid Fever	9	9	4	6	5	2	2	2	2	2	2	2	2	2	2
Scarlet Fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Smallpox	6	6	3	4	3	2	2	2	2	2	2	2	2	2	2
Measles	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diphtheria	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Whooping Cough	18	18	10	12	10	2	2	2	2	2	2	2	2	2	2
Acute Infectious Diseases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tuberculosis of Lungs (Consumption)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tuberculous Meningitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Tuberculosis	9	9	5	7	6	3	3	3	3	3	3	3	3	3	3
Septic Meningitis	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Other Infectious Diseases	12	12	7	9	8	4	4	4	4	4	4	4	4	4	4
Bronchitis	12	12	7	9	8	4	4	4	4	4	4	4	4	4	4
Other Respiratory Diseases	4	4	2	3	3	1	1	1	1	1	1	1	1	1	1
Diseases of Stomach (Cancer excepted)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dysentery Diseases (under 5 years)	95	270	225	147	148	244	35	10	296	10	296	10	296	10	296
Hernia, Intestinal Obstruction	7	42	49	16	33	7	1	8	1	8	1	8	1	8	1
Cancers of Liver	4	38	42	24	18	4	1	3	1	3	1	3	1	3	1
Cancers of Stomach	4	38	42	24	18	4	1	3	1	3	1	3	1	3	1
Diseases of Women (not Cancer)	2	9	11	11	11	2	1	1	1	1	1	1	1	1	1
Puerperal Septicemia	2	12	14	14	14	2	1	1	1	1	1	1	1	1	1
Other Puerperal Diseases	3	39	42	24	18	3	1	3	1	3	1	3	1	3	1
Congenital Deformity and Malformation	25	320	345	105	150	345	10	10	345	10	345	10	345	10	345
Old Age	1	33	34	16	18	1	1	1	1	1	1	1	1	1	1
Hoarding	1	19	20	10	10	1	1	1	1	1	1	1	1	1	1
Suicide	1	35	56	40	16	1	1	1	1	1	1	1	1	1	1
Undeclared Causes	48	611	659	335	324	45	17	17	79	21	35	119	199	206	206
Totals for 1918	612	7866	8483	4508	3915	1215	433	434	2082	314	780	2308	1754	1245	1245

THE COMMISSIONER OF HEALTH, NEW YORK, has received from the U. S. BUREAU OF VITAL STATISTICS, the following table showing the number of deaths from principal causes for the year 1918.



MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY MONTHS 1919

CAUSES	Totals for 1919	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec.
Total A. Causes	5,584	765	771	688	498	415	385	399	341	340	362	339	404
Infective Pathogens	2				1				1		1		
Typhoid Fever	1		1	1	1				1	3	2		
Scarlet													
Dysentery													
Typhus													
Septic Fever	7	1											
Widal's Cholera	17	9	1	2	4		1	9			1	1	3
Typhoid	4					1		1					
Typhoid	5	5	7	11	7	2	2	2	4				
Typhoid	967	132	119	87	24	6	2	1	1			5	3
Typhoid	2	2											
Typhoid													
Typhoid	5	5	6	9	13	17	16	20	17	27	21	23	4
Typhoid	44	4	8		4	4	2	3	5	1	3		
Typhoid	98	2	2		2	2	2	2	2	2	2	2	2
Typhoid	7	4	2	3	2	2	2	2	2	2	2	2	2
Typhoid	8	1	1	1	1	1	1	1	1	1	1	1	1
Typhoid	10	10	97	68	45	31	6	8	8	11	6	25	30
Typhoid			84	42	16	12	5	6	5	8	6	11	21
Typhoid		4	4	7	5	5	5	1	3	4	4	4	
Typhoid	8	14	15	1	3	2	6	7	4	12	7		
Typhoid	4												
Typhoid	26	4						10	5	2		4	15
Typhoid	15	1			2	2	2	4	2	2	1		1
Typhoid	24	24	40	3	14	16	13	27	18	18	14	4	5
Typhoid	14					4			3	3			
Typhoid	13	4	6	8	4		2		1	1			
Typhoid	6		9	29	2	30	1	21	14	17	17	9	24
Typhoid	90	2	9	9	28	31	4	4	8	2	3	4	4
Typhoid	70		2	1	1	1	1	3	1	1	14	26	29
Typhoid	50	1	3	9	10	2	4	6	3		5	2	2
Typhoid	60	2	2										

## YEARLY MORTALITY FIGURES, 1916-1919

CAUSES	1919	1918	1917	1916
Total, All Causes	5,534	8,493	6,205	6,357
Infantile Paralysis	2	6	11	376
Typhoid Fever	9	15	17	23
Malaria				1
Measles	7	20	5	102
Scarlet Fever	12	11	3	7
Whooping Cough	4	34	66	25
Diphtheria	50	87	50	57
Influenza	74	104	24	45
Epidemic Meningitis, Cerebro Spinal	22	45	43	22
Other Epidemic Diseases	2	1	4	1
Tuberculosis of Lungs (Consumption)	552	663	704	685
Tuberculous Meningitis	41	61	42	61
Other Tuberculosis	44	54	74	37
Cancer, Malignant Tumor	668	331	351	335
Simple Meningitis	30	35	45	28
Apoplexy, Softening of the Brain	307	319	356	343
Organic Heart Diseases	539	672	599	495
Bronchitis	98	178	155	137
Pneumonia, Lobar	432	1,029	553	497
Pneumonia, Broncho	213	469	211	264
Other Respiratory Diseases	57	92	137	160
Diseases of the Stomach (Cancer excepted)	53	71	66	64
Diarrhoeal Diseases (under 5 years)	296	331	315	264
Appendicitis and Typhlitis	54	64	51	67
Hepatitis, Intestinal Obstruction	49	64	83	33
Cancer of Liver	42	51	71	49
Bright's Disease and Nephritis	504	629	668	704
Diseases of Women (not Cancer)	11	6	16	47
Puerperal Septicæmia	14	11	6	12
Other Puerperal Diseases	42	42	23	14
Congenital Debility and Malformation	345	442	430	435
Old Age	34	27	46	85
Accident	304	389	296	303
Homicide	26	20	25	14
Suicide	56	50	64	55
Ill-defined Causes		2		1
All Other Causes	668	640	621	476
Yearly Death Rate (per 1,000)	12.6	19.7	15.3	16.5

ANNUAL DEATH RATES FOR 1919 IN CITIES OVER  
100,000 POPULATION, BUREAU OF THE CENSUS  
ESTIMATED POPULATION JULY 1, 1918.

Rate per 1,000 population.

Cities—	Rate	Cities—	Rate
1. Memphis .....	21.5	21. New York .....	14.3
2. New Orleans .....	19.2	22. Cambridge .....	13.6
3. Nashville .....	18.6	23. Syracuse .....	13.6
4. Baltimore .....	17.1	24. Providence .....	13.5
5. San Francisco .....	16.9	25. Dayton .....	13.5
6. Richmond .....	16.7	26. Los Angeles .....	13.5
7. Albany .....	16.4	27. Fall River .....	13.4
8. Pittsburgh .....	16.2	28. New Haven .....	13.4
9. Louisville .....	16.0	29. Rochester .....	13.3
10. Washington, D. C.....	16.0	30. St. Louis .....	13.2
11. Lowell .....	15.8	31. Chicago .....	13.0
12. Buffalo .....	15.5	32. Oakland .....	12.9
13. Atlanta .....	15.4	33. NEWARK .....	12.9
14. Cincinnati .....	15.3	34. Cleveland .....	12.6
15. Birmingham .....	15.2	35. Toledo .....	12.3
16. Worcester .....	15.1	36. Grand Rapids .....	11.6
17. Boston .....	15.1	37. Minneapolis .....	11.5
18. Philadelphia .....	14.8	38. Milwaukee .....	11.1
19. Columbus .....	14.7	39. Omaha .....	10.7
20. Indianapolis .....	14.5	40. St. Paul .....	10.6

Out of forty American cities, Newark has the eighth lowest death rate.

GENERAL TABLE NO. 1 (1919).

Deaths from all causes, not including non-resident or unknown deaths, by wards, age and sex, including deaths in City Hospital and the Sanatoriums at Soho and Verona, New Jersey

AGE	WARDS																Total
	1st	2d	3d	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
Under 1 year																	
Males	47	1	30	11	46	10	26	23	14	5	19	37	28	48	11	1	477
Females	43	21	31	7	38	14	21	25	19	27	17	31	2	41	16	15	379
Between 1 and 4—																	
Males	26	4	32	6	17	5	9	7	12	22	5	11	18	21	12	5	102
Females	27	2	16	5	20	2	6	11	9	13	9	15	9	18	6	5	178
Between 5 and 9—																	
Males	7	1	3	1	5	2	6	7	3	6	3	4	6	6	3	6	76
Females	1	6	10		4	3	3	4	6	3	4	5	10	5	5	4	82
Between 10 and 14—																	
Males	4	1	2	1	1	1	2	3	4	3	1	2	4	4	1		34
Females		4	3	1	3		1	3	1	3	2	1	7	2	1	4	37
Between 15 and 19—																	
Males	11	6	4		6	3	3	2	5	2	4	3	5	5	1	1	61
Females	8	4	7	1	5	2	2	5	3		3	1	6	5	4	3	71
Between 20 and 24																	
Males	4	5	5	8	7	1	8	6	4	7	3	2	8	5	9	7	80
Females	7	4	7	1	7	3	10	10	9	6	4	5	9	12	8	4	106
Between 25 and 29																	
Males	7	7	11	6	7	7	6	1	15	8	8	10	11	12	2	7	125
Females	10	8	10	2	6	4	5	10	16	10	7	8	13	8	10	19	145

GENERAL TABLE NO. 1 (1919)—Continued.

Deaths from all causes, not including non-resident or unknown deaths, by wards, age and sex, including deaths in City Hospital and the Sanatoriums at Sobor and Verona, New Jersey

AGES	WARDS																Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
Between 30 and 34—																	
Males	10	12	17	9	10	6	5	10	8	5	4	10	15	12	9	7	149
Females	7	5	12	3	4	7	12	15	10	7	6	4	13	10	4	4	123
Between 35 and 39—																	
Males	5	10	14	9	21	6	15	14	22	14	4	14	7	13	7	3	138
Females	9	6	5	4	6	6	7	7	5	7	3	5	8	14	6	11	109
Between 40 and 44—																	
Males	19	11	14	13	8	3	7	7	8	6	7	18	12	13	9	6	161
Females	13	4	9	3	7	7	7	9	8	4	9	7	11	9	7	8	121
Between 45 and 49—																	
Males	6	15	17	19	17	9	7	8	17	9	7	12	20	13	6	5	184
Females	6	5	9	3	6	6	4	14	11	2	8	5	12	9	7	7	114
Between 50 and 54—																	
Males	8	13	23	16	8	10	13	16	17	5	11	10	16	11	5	14	196
Females	12	10	15	6	5	5	4	15	12	8	9	6	10	16	10	10	154
Between 55 and 59—																	
Males	7	12	13	9	8	9	6	16	12	6	10	9	10	12	3	10	152
Females	6	4	9	5	9	3	7	19	13	5	13	10	16	10	4	11	135
Between 60 and 64—																	
Males	8	8	10	9	6	8	6	14	13	6	11	10	16	9	7	14	155
Females	9	2	5	2	19	15	7	15	14	6	10	5	20	19	10	9	157

GENERAL TABLE NO. 1 (1919)—Continued.

Deaths from all causes, not including non-resident or unknown deaths, by wards, age and sex, including deaths in City Hospital and the Sanatoriums at Soho and Verona, New Jersey.

AGES	WARDS																Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
Between 65 and 69—																	
Males	7	10	9	6	6	11	6	16	15	6	10	9	5	7	5	9	137
Females	14	12	14	8	6	11	10	18	11	6	10	7	1	7	7	11	162
Between 70 and 74—																	
Males	8	5	3	2	7	10	5	17	13	3	1	1	1	1	7	12	133
Females	7	9	13	5	10	13	7	16	13	6	13	4	12	10	8	8	149
Between 75 and 79—																	
Males	6	10	7	3		5	6	13	10	3	9	3	6	4	5	5	95
Females	5	7	8	3	5	7	5	19	12	6	13	6	10	7	5	7	125
Between 80 and 84—																	
Males		1	5	3	1	8		6	5	3	6	1	5	1	2	3	50
Females	6	3	3	4	4	6		20	16	4	13	4	6	2	3	5	99
Between 85 and 89—																	
Males	5	1			2	1	1	3	2		5		3	2	1	1	27
Females	3	1	1	2		1		7	8	1	7		2	4		6	43
Ninety and over—																	
Males	1	1			1		1		1	1	1					2	9
Females	1	1		1			1	4	4				1		1		14
TOTALS—	43	40	48	17	39	53	37	129	106	28	20	30	11	41	41	26	5147
Males	30	37	22	13	18	15	18	109	71	16	17	15	3	28	16	14	361
Females	12	11	18	6	17	15	19	57	18	11	13	8	8	13	11	12	2486

**MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
FIRST WARD.**

CAUSES	Col ored	White	Total deaths	Males	Females	Un- der 1 Year	1 and under 2	2 and under 5	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	1	80	872	408	291	302	30	25	28	142	37	71	8	63
Infantile Paralysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fever	-	-	1	1	-	1	-	-	-	-	1	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	1	8	3	2	-	-	2	2	1	-	-	-	-
Diphtheria	-	-	7	7	5	1	2	4	7	-	-	-	-	-
Influenza	-	-	16	16	9	2	-	-	5	-	1	5	1	-
Epidemic Meningitis (Cerebro Spinal)	-	1	1	1	1	-	-	-	-	1	-	1	-	-
Other Epidemic Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis of Lungs (Consumption)	-	1	31	31	17	1	-	-	1	-	12	22	1	-
Tuberculous Meningitis	-	2	2	2	1	1	1	-	2	-	-	-	-	-
Other Tuberculosis	-	-	2	2	2	1	-	1	2	-	-	-	-	-
Cancer, Malignant Tumor	-	-	16	16	4	12	-	-	-	-	-	3	6	7
Simple Meningitis	-	-	3	3	3	-	-	2	3	-	-	-	-	-
Apoplexy Softening of the Brain	-	4	13	17	9	8	-	-	-	-	-	1	11	5
Organic Heart Diseases	-	3	33	36	17	19	-	-	-	4	1	7	11	13
Bronchitis	-	1	14	15	4	11	6	3	13	-	-	-	1	1
Pneumonia, Lobar	-	3	28	41	20	21	3	3	11	6	1	12	3	3
Pneumonia, Broncho	-	2	19	21	11	10	7	6	15	1	-	2	2	1
Other Respiratory Diseases	-	-	4	4	3	1	-	1	1	-	-	-	1	2
Diseases of Stomach (Cancer excepted)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diarrhoeal Diseases (Under 5 years)	-	1	34	35	19	3	7	4	39	-	-	-	-	-
Appendicitis and Typhlitis	-	-	4	4	1	3	-	-	-	-	-	2	-	1
Hernia, Intestinal Obstruction	-	1	2	3	1	2	1	-	1	-	-	-	2	-
Cirrhosis of Liver	-	-	4	4	1	3	-	-	-	1	-	2	2	-
Bright's Disease and Nephritis	-	3	21	24	11	13	-	1	1	2	1	5	5	10
Diseases of Women (not Cancer)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Septicæmia	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Puerperal Diseases	-	-	3	3	2	-	-	-	-	-	-	3	-	-
Congenital Deformity and Malformation	-	1	26	27	20	10	30	-	30	-	-	-	-	-
Old Age	-	1	4	5	2	3	-	-	-	-	-	-	-	5
Accident	-	1	18	19	14	5	-	1	1	13	-	3	1	1
Homicide	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Suicide	-	-	3	2	2	1	-	-	-	-	-	1	2	-
Ill defined Causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Other Causes	-	1	44	45	24	21	3	1	4	2	8	10	8	13
<b>Totals for 1913</b>		<b>90</b>	<b>843</b>	<b>423</b>	<b>290</b>	<b>314</b>	<b>194</b>	<b>61</b>	<b>64</b>	<b>270</b>	<b>37</b>	<b>63</b>	<b>19</b>	<b>67</b>

MORTALITY FROM PRINCIPAL CAUSES OF DEATH, BY SEX, AGE AND COLOR.  
SECOND WARD.

[illegible]



MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
THIRD WARD

CAUSES	Un- der 1 Year	1 and Un- der 2	2 and Un- der 5	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	81	15	13	109	29	23	92	101	63
Infantile Paralysis	2	-	-	2	-	-	-	-	-
Typhoid Fever	-	-	-	-	-	1	-	-	-
Measles	-	-	-	-	-	-	-	-	-
Scarlet Fever	-	-	2	2	-	-	1	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-
Diphtheria	1	-	2	2	4	-	-	-	-
Scarlet Measles (Scarlet Spots)	1	-	-	3	1	1	5	-	1
Other Epidemic Diseases	-	-	-	-	-	-	-	-	-
Tuberculosis of Lungs (Consumption)	1	2	2	5	2	1	1	-	-
Tuberculous Meningitis	1	-	-	-	-	-	-	-	-
Cancer, Malignant Tumor	1	-	-	-	1	1	3	12	10
Softening of the Brain	3	-	-	-	-	-	1	-	10
Other Heart Diseases	2	-	1	2	3	2	11	14	6
Inflammation of Lobar	9	-	1	3	-	3	6	8	6
Inflammation of Broncho	8	3	1	15	1	2	3	1	3
Other Respiratory Diseases	1	1	-	1	-	-	-	-	-
Diseases of Stomach (Cancer excepted)	-	-	-	2	-	-	2	2	-
Diarrhoeal Diseases (under 5 years)	6	3	-	22	-	-	-	-	-
Appendicitis and Typhitis	-	-	2	2	-	-	-	-	-
Hernia, Intestinal Obstruction	1	-	-	-	-	-	-	-	-
Cancer of Liver	-	-	-	-	-	-	-	1	-
Bright's Disease and Nephritis	3	1	-	1	-	1	4	11	5
Diseases of Women (not Cancer)	-	-	-	-	-	-	-	-	-
Puerpera, Septicemia	1	-	-	-	-	-	-	-	-
Other Puerperal Diseases	-	-	-	-	-	-	-	-	-
Congenital Debility and Malformation	6	-	-	30	-	-	1	-	-
Old Age	-	-	-	-	-	-	-	-	-
Hoarding	2	1	2	4	4	1	1	3	1
Starvation	-	-	-	-	-	-	2	-	-
Unidentified Causes	-	-	-	-	-	1	2	5	-
All Other Causes	6	5	-	11	-	2	10	10	18
Total for 1904	81	15	13	109	29	23	92	101	63

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
FOURTH WARD.

CAUSES	Male colored	White deaths	Total deaths	Male deaths	Female deaths	Un- der 1 Year	1 and 2 der	2 and 3 der	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	27	168	197	131	66	18	8	3	29	3	10	49	60	37
Infantile Paralysis														
Typhoid Fever														
Malaria														
Smallpox														
Measles														
Scarlet Fever														
Whooping Cough														
Diphtheria														
Influenza	1	4	5	2	3							4	1	
Epidemic Meningitis (Cerebro Spinal)		1	1		1			1	1					
Other Epidemic Diseases														
Tuberculous Meningitis														
Other Epidemic Diseases		1	1	1										
Cancer, Malignant Tumor		10	10	6	4									
Apoplexy, Softening of the Brain		7	7	4	3									
Coronary Heart Diseases	1	17	18	8	10					1	1	1	8	4
Stroke	1	4	5	4	1	2	2		4			1		7
Pneumonia, Lobar	4	13	17	15	2			1	1		2	5	6	3
Pneumonia, Broncho	1	3	4	4			2	1	3					1
Other Respiratory Diseases														
Diseases of Stomach (Cancer excepted)	1	2	3	1	2		1		1		1		1	
Cardiac Diseases (under 5 years)		6	6	1	5	4	2		6					
Alcoholism and Apoplexy														
Intestinal Obstruction	1	2	3	3									3	
Cholera		1	1	1									1	
Bright's Disease and Nephritis	3	13	16	8	8					1		2	7	6
Diseases of Women (not Cancer)														
Septicæmia														
Other Puerperal Diseases		1	1		1							1		
Other Diseases		2	2		2									2
Accident	2	13	15	11	4									4
Homicide	1	1	2		2									
Self-harm		1	1	1										
Unnatural Causes	3	24	27	17	10	1	1						4	7
Totals for 1918	37	277	302	195	107	30	3	13	46	7	26	53	60	41

**MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
FIFTH WARD.**

CAUSES	Col ored	White	Total	Males	Fe males	Un- der 1 Year	1 and Under 5	2 and Under 5	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	12	322	334	184	150	79	23	14	116	18	25	69	69	42
Infantile Paralysis														
Erysipelas														
Measles														
Scarlet Fever														
Whooping Cough														
Diphtheria														
Lithiasis	1	18	19	9	10	1	1	1	3	1	4	8	8	1
Tubercular Meningitis (Cerebral Spinal)		4	4	1	3		1	1	2	1		1		
Other Tubercular Diseases														
Tuberculosis of Lungs (Consumption)		31	31	19	12	1			1	1	4	13	13	2
Tuberculosis Meningitis		2	2	2		1	1		2					
Other Tuberculosis		2	2	2		1		1	2					
Cancer (All Stages)		15	15	10	5							3	7	5
Stroke (Cerebral)		4	4	2	2	2	1		3	1				
Apoplexy (Stroke of the Brain)		11	11	1	1				3	1				5
Organic Heart Diseases				19	11	1			1		3	1	9	10
Bronchitis	1	6	7	8	4	4	1		5				1	1
Pneumonia (Toxic)	1	99	100	57	43	3			2	5	10	5	1	
Pneumonia (Bacterial)		1	1	1	1	1	1	1	14		3			
Other Respiratory Diseases		1	1	1	1	1	1	1	9		1			
Diseases of Stomach and Intestines (Excluded)		4	4			1						1		
Diabetes Mellitus		4	4			3		3	16					
Apoplexy (Stroke of the Brain)		5	5	1	2					2	1			
Hernia, Intestinal Obstruction	1	1	2	2		1			1					1
Cirrhosis of Liver														
Bright's Disease and Nephritis	1	90	91	11	11					1	1	2	2	6
Diseases of Women (not Cancer)														
Puerperal Septicemia		1	1		1							1		
Other Puerperal Diseases		2	2		2						1	1		
Congenital Debility and Malformation		15	15	9	6	15			15					
Old Age		2	2		2									
Accidents		20	20	15	5		2	2	4	3	5		4	2
Violence		1	1	1	1							1		2
Unlabeled Causes				1	1								2	
All Other Causes		99	99	17	16	2	1	3	6	1		9	9	6
Totals for 1918	33	335	368	211	157	117	37	23	208	42	42	154	98	42

NOTATION FROM PRINCIPAL CAUSES OF DEATH IN SIX MONTHS OF 1913.  
SIXTH WARD.

CAUSES	Colored	White	Total	Males	Females	Under 1 Year	1 and 2 der	2 and 5 der	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	5	226	231	115	116	24	3	4	31	6	9	46	66	73
Typhoid Fever														
Scarlet Fever														
Whooping Cough														
Diphtheria														
Epidemic Meningitis (Cerebro Spinal)														3
Other Epidemic Diseases														
Tuberculous Meningitis														1
Other Tuberculous Diseases														1
Cerebral Malignant Tumor		18	18	7	11									7
Simple Meningitis		12	12	7	5									9
Apoxy, Softening of the Brain		12	12	7	5									9
Organic Heart Diseases	1	25	26	10	16	2			2		2		11	9
Bronchitis		2	2	1	1									1
Pneumonia, Lobular	1	19	20	10	10	1			1	2		12	2	2
Pneumonia, Broncho		8	8	2	6	3	1							
Other Respiratory Diseases		1	1	1										
Dysentery														
Diarrhoeal Diseases (Under 5 years)														
Appendicitis and Typhitis														
Hemorrhage, Intestinal Obstruction														
Cancers of Liver		2	2											
Brucella Disease and Nephritis		49	49	21	19									1
Diseases of Women (not Cancer)														
Unlabeled Causes		10	10	5	5						1			
All Other Causes		2	2	2	2									2
Total for 1913	16	334	350	176	174	5	1	4	33	8	11	58	77	84

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
 SEVENTH WARD

CAUSES	Ye. ow	Co. ored	White	Total leaths	Males	Fe- males	Un- der 1 Year	1 and 2 Un- der 2	2 and 5 Un- der 5	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	4	14	257	138	119	47	7	8	62	12	29	64	54	1
Infantile Paralysis														
Typhoid Fever			1	1	1									
Malaria										1				
Smallpox														
Measles														
Scarlet Fever			2	2		1		1	1					
Whooping Cough			1	1	1			1						
Diphtheria									1					
Polio														
Epidemic Meningitis (Cerebro Spinal)			11	4										
Other Epidemic Diseases			2	1		1			1	1				
Tuberculosis of Lungs (Consumption)	6	24	30	22	8						6	5	5	
Tuberculous Meningitis			1											
Other Tuberculosis			5	8				1	1					
Cancer, Malignant Tumor			20	8	12	1			1		1	3		
Simple Meningitis			2	1	1									
Apoplexy, Softening of the Brain	2	8	10	4				1	1			1	2	7
Organic Heart Diseases			18	9									7	6
Stroke			7	4						2				
Infantile Cholera	4		21	14	7	1			3	1	1	1	1	1
Other Infectious Diseases			17	9		8		2	11	2	2	2	2	
Scarlet Fever (excepted)				1	1									
Diphtheria (excepted)			12	6		11			13					
Angina and Typhilitis			2	2										
Hemorrhoids, Stricture, Obstruction			1	1	1					1	1			
Dysentery of Liver			1	1						1				
Gonorrhea Disease and Nephritis	2	11	13	7	6							1		
Diseases of Women (not Cancer)	1		1									1	6	6
Typhoid Epidemic	1		1									1		
Other Infectious Diseases			2									2		
Other Infectious Diseases (not for cancer)	1	18		8	7	10			15		1	1		
Other Infectious Diseases														
Hemorrhoids	1			10	6			1	1	2	6	3	3	4
Stricture														
Undefined Causes			1	1								3	1	
All Other Causes														
Totals for 1918	40	26	281	141	140	65	21	14	100	15	41	82	69	59

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
EIGHTH WARD

CAUSES	Col- ored	White	Total	Males	Females	Under 1 Year	1 and 2 der 2	2 and 5 der 5	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total, All Causes	1	27	28	426	189	237	48	13	5	66	7	1	8	10
Infantile Paralysis														
Typhoid Fever			1	1		1							1	
Malaria														
Smallpox														
Measles			1	1		1			1					
Scarlet Fever														
Whooping Cough														
Diphtheria		1	1	1	1					1				
Epidemic Meningitis (Cerebro Spinal)	2	26	28	11	17	1	2		3	1	5	17	2	
Other Meningitis		2	2	1	1	1		1	2					
Tuberculosis (Consumption)	1	22	23	12	10						4	18	4	1
Other Tuberculosis		1	3	4	1	3		1	1					
Simple Meningitis			1	1		1								7
Amoebic Dysentery											1			
Organic Heart Diseases		50	50	25	24	1			1	4	3	3	10	43
Iron-Pits		4	4											
Pneumonia, Lobar	3	20	23	14	9	1	1	1	3	3	1	8	6	2
Pneumonia, Broncho														
Other Respiratory Diseases														
Dysentery, Bacillary							4		1				3	3
Amoebic Dysentery														
Amoebic Dysentery		2	2	1	1				1			1	1	
Amoebic Dysentery														
Cirrhosis of Liver		3	3	2	1				1			1	1	
Bright's Disease and Nephritis		47	48	26	22			1	1			1	1	
Diseases of Women (not Cancer)		1	1	2						2	1	4	19	21
Septicemia														
Other Puerperal Diseases		2	2	3		3								
Cancer, 1897-1900														
Old Age		5	5	11	16	97			37					5
Violence		1	1	5	7									
Homicide									1	4	1			4
Suicide		1	4	5	3	2					1	2	2	
All Other Causes														
Totals for 1918	5	50	55	22	33	3	1	1	5	1	8	9	19	18



	No.	White	Total	Males	Females	Under 1	1 and 2	2 and 3	3 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and over
Total, All Causes	15	267	282	164	118	72	18	17	107	14	16	61	46	38
Infantile Paralysis	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malaria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	..	1	1	..	1	1	..	..	..	..	..	..	..	..
Scarlet Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria	..	6	6	4	2	..	..	..	..	..	..	..	..	..
Epidemic	..	15	15	5	10	..	..	..	..	..	..	..	..	..
of Meningitis (Cerebro Spinal)	..	1	1	..	1	..	..	..	..	..	..	..	..	..
of Local Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..
of Diseases of Lungs (Consumption)	..	99	99	74	25	..	..	..	..	..	..	..	..	..
of Diseases of Arteries	..	1	1	..	1	1	..	..	1	..	..	..	..	..
of Tuberculosis	..	4	4	4	..	..	..	2	2	..	..	..	..	..
Cancer, Malignant Tumors	1	10	11	4	7	..	..	..	..	..	1	9	1	..
of Malignant	..	2	2	1	1	..	..	..	..	1	..	..	..	..
Apoplexy, Softening of the Brain	2	10	12	5	7	..	..	..	..	..	1	7	4	..
Organic Heart Diseases	..	15	15	6	9	..	..	..	..	2	..	..	..	..
Bronchitis	..	10	10	4	6	6	2	..	8	..	4	5	4	2
Pneumonia, Lobar	2	25	27	19	8	2	3	..	5	..	2	13	3	4
Pneumonia, Broncho	1	16	17	9	8	6	4	2	12	2	..	2	1	1
Other Respiratory Diseases	..	3	3	2	1	..	..	..	1	..	..	1	1	..
Diseases of Stomach (Cancer excepted)	..	3	3	3	..	..	..	..	..	..	..	..	..	..
of Diseases (Under 5 years)	1	34	35	25	10	25	3	4	35	..	..	..	..	..
of Diseases and Typhitis	..	1	1	1	..	..	..	..	..	..	1	..	..	..
Hernia, Intestinal Obstruction	1	5	6	2	4	1	..	..	1	..	..	4	1	..
Cirrhosis of Liver	1	1	2	1	1	..	..	..	..	..	1	..	1	..
Hugh's Disease and Septicemia	2	19	21	11	10	1	..	..	1	..	2	3	5	10
Diseases of Women (not Cancer)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
of Septicemia	..	2	2	..	2	..	..	..	..	1	..	..	..	..
of Diseases	..	3	3	..	3	..	..	..	..	..	..	..	..	..
of Diseases	..	18	20	15	5	20	..	..	20	..	..	..	..	..
of Diseases	..	1	1	..	1	..	..	..	..	..	..	..	..	..
of Diseases	..	13	13	11	2	1	3	3	7	1	1	2	2	1
of Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..
of Diseases	..	3	3	1	2	..	..	..	..	..	2	1	..	..
of Diseases	1	22	23	13	10	6	1	..	6	2	..	..	..	..



MOBILITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
ELEVENTH WARD

CAUSES	Ye- low	Col- ored	White deaths	Total deaths	Males Fe- males	Un- der 1 Year	1 and Un- der 2	2 and Un- der 5	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Infantile Paralysis	-	-	1	1	-	-	-	1	-	-	-	-	-	-
Typhoid Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	-	1	1	1	1	-	1	-	1	1	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	1	1	1	-	-	-	-	-	-	-	-	-
Epilepsy	-	2	11	13	8	10	-	4	4	1	-	-	-	1
Chorea Meninges (Cerebro Spinal)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chorea Epidemic Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chorea of Lungs (Consumption)	-	6	18	24	16	8	-	-	1	1	6	1	5	2
Chorea Tuberculosis	-	-	1	1	1	1	-	-	-	-	-	-	-	-
Chorea Maligna (Cancer)	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Stroke Meninges	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apoplexy, Softening of the Brain	1	26	27	12	15	-	-	-	-	-	1	12	14	-
Organic Heart Diseases	1	36	37	15	22	-	1	-	1	2	2	5	10	-
Bronchitis	-	3	3	1	2	-	-	-	-	-	-	-	-	2
Pneumonia, Lobar	1	18	14	8	11	4	-	1	5	-	2	4	2	1
Pneumonia, Broncho	1	5	6	2	4	-	3	-	3	-	-	1	1	1
Other Respiratory Diseases	1	2	3	2	1	-	-	-	-	-	-	-	1	2
Diarrhoeal Diseases (under 5 years)	-	-	9	9	9	6	-	1	9	-	-	-	-	-
Appendicitis and Typhlitis	-	-	3	3	1	-	-	-	1	-	-	-	2	-
Hernia, Intestinal Obstruction	-	-	1	1	1	-	-	-	-	-	-	-	1	-
Cirrhosis of Liver	-	-	1	1	1	-	-	-	-	-	-	-	1	-
Bright's Disease and Nephritis	-	1	42	43	24	19	1	-	1	-	-	4	18	20
Diseases of Women (not Cancer)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chorea Meninges	-	-	9	9	2	-	-	-	-	-	-	-	-	-
Chorea Epidemic Diseases	-	2	14	16	6	10	-	-	16	-	-	-	-	-
Chorea Tuberculosis	-	-	4	4	2	-	-	-	-	-	-	-	-	4
Chorea Maligna (Cancer)	-	-	10	10	5	-	1	1	-	-	-	-	-	2
Stroke	-	-	2	2	2	-	-	-	-	-	-	-	-	-
Apoplexy, Softening of the Brain	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Organic Heart Diseases	-	2	45	47	20	27	-	-	-	1	4	10	12	20
Totals for 1918	-	25	338	363	173	290	7	1	61	11	31	77	83	121

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
TWELETH WARD

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DEPARTMENT OF PUBLIC AFFAIRS

CAUSES	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	289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TOTAL, ALL CAUSES	18	20	130	67	10	16	93	12	14	76	41
Infantile Paralysis											
Typhoid Fever	1	2	2					2			
Malaria											
Scarlet Fever											
Whooping Cough											
Diphtheria		3	9	2			3	3			
Measles		7	1							6	1
Other Epidemic Diseases											
Dysentery		1		1			1				
Epidemic Meningitis		4	2	2	3		3	1			
Other Tuberculosis		1	1	1				1			
Cancer, Malignant Tumor	20	20	9	11						2	14
Simple Meningitis											
Apoplexy, Softening of the Brain	12	12	7	5						1	4
Organic Heart Diseases	27	27	13	14	1		1	1	2	2	8
Typhoid, Lobar	17	17	11	6	1		2	3	1	1	9
Pneumonia, Broncho	10	10	3	7	3		3	6	1	2	1
Other Respiratory Diseases	3	3	1	2						1	1
Diseases of Stomach (Cancer excepted)											
Local Diseases (under 5 years)	22	32	16	16	25	6	1	32			
Appendicitis and Typhitis	2	2	2						1	1	
Cirrhosis of Liver	1	1	1							1	
Bright's Disease and Nephritis	22	22	16	6					1	8	10
Diseases of Women (not Cancer)											
Puerperal Septicæmia	1	1		1						1	
Other Puerperal Diseases	3	3		3					1	2	
Congenital Debility and Malformation											
Old Age		91	1	4	2	1		3	1	8	1
Suicide	5	5	5							2	
Unlabeled Causes											1
All Other Causes	22	22	10	12	3	1	4	2		3	4
TOTAL for 1918	8	571	579	353	227	132	43	37	212	29	53

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Other Epidemic Diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Cancer, Malignant Tumor	29	29	9	11	-	-	-	-	-	-	2	14	4
Simple Meningitis	-	-	-	-	-	-	-	-	-	-	-	-	-
Epilepsy, Softening of the Brain	12	12	7	5	-	-	-	-	-	-	1	4	7
Cranial Heart Diseases	27	27	18	14	1	-	1	1	2	-	2	8	13
Tuberculous, Lobar	17	17	11	6	1	-	2	3	1	1	9	2	1
Tuberculous, Broncho	10	10	3	7	3	-	3	6	1	-	2	1	-
Other Respiratory Diseases	3	3	1	2	-	-	-	-	-	-	1	1	1
Diseases of Stomach (Cancer excepted)	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Diseases (Under 5 years)	22	32	16	16	25	6	1	32	-	-	-	-	-
Appendicitis and Typhitis	2	2	2	-	-	-	-	-	-	1	1	-	-
Typhitis	-	-	-	-	-	-	-	-	-	-	-	2	-
Cirrhosis of Liver	1	1	1	-	-	-	-	-	-	-	1	-	-
Bright's Disease and Nephritis	22	22	16	6	-	-	-	-	-	1	8	10	8
Diseases of Women (Not Cancer)	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Septicæmia	1	1	-	1	-	-	-	-	-	-	1	-	-
Other Puerperal Diseases	2	3	-	3	-	-	-	-	-	1	2	-	-
Congenital Deformity and Malformation	-	-	-	-	-	-	-	-	-	-	-	-	-
Old Age	-	91	1	4	2	1	-	3	1	-	1	-	-
Suicide	5	5	5	-	-	-	-	-	-	-	2	-	1
Ill Defined Causes	-	-	-	-	-	-	-	-	-	-	-	-	-
All Other Causes	22	22	10	12	3	-	1	4	2	-	3	4	9
<b>Totals for 1918</b>	<b>8</b>	<b>571</b>	<b>579</b>	<b>352</b>	<b>227</b>	<b>132</b>	<b>43</b>	<b>37</b>	<b>212</b>	<b>29</b>	<b>53</b>	<b>161</b>	<b>11</b>

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Pneumonia, lobar	17	17	11	6	1	2	3	1	1	9	2	1	1
Pneumonia, Broncho	10	19	3	7	3	3	6	1	2	2	1	1	1
Respiratory Diseases	3	3	1	2	3	3	1	1	1	1	1	1	1
Diseases of Stomach (Cancer excepted)	22	32	16	16	25	6	1	32	1	1	1	1	1
Local Diseases (under 5 years)	2	2	2	—	—	—	—	—	1	1	—	—	—
Appendicitis and Typhitis	1	1	1	—	—	—	—	—	1	1	2	—	—
Cirrhosis of Liver	1	1	1	—	—	—	—	—	1	1	—	—	—
Bright's Disease and Nephritis	22	22	16	6	—	—	—	—	1	8	10	8	8
Diseases of Women (not Cancer)	1	1	—	1	—	—	—	—	1	1	—	—	—
Puerperal Septicæmia	1	1	—	1	—	—	—	—	1	1	—	—	—
Other Puerperal Diseases	3	3	—	3	—	—	—	—	1	2	—	—	—
Congenital Deformity and Malformation	—	—	—	—	—	—	—	—	—	—	—	—	—
Old Age	—	—	1	4	2	1	—	—	3	1	8	1	1
Suicide	5	5	5	—	—	—	—	—	—	2	—	—	1
Unlabeled Causes	—	—	—	—	—	—	—	—	—	—	—	—	—
All Other Causes	22	32	10	12	3	1	4	2	—	3	4	9	9
<b>Totals for 1918</b>	<b>8</b>	<b>571</b>	<b>579</b>	<b>352</b>	<b>227</b>	<b>132</b>	<b>43</b>	<b>37</b>	<b>212</b>	<b>29</b>	<b>53</b>	<b>101</b>	<b>111</b>

Appendixes and Totals	2	3	2	—	—	—	—	—	1	1	2	—
Cirrhosis of Liver	1	1	1	—	—	—	—	—	1	1	—	—
Bright's Disease and Nephritis	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of Women (not Cancer)	22	22	16	6	—	—	—	—	1	8	10	8
Puerperal Septicæmia	1	1	—	1	—	—	—	—	—	1	—	—
Other Puerperal Diseases	3	3	3	—	—	—	—	—	1	2	—	—
Constitutional Debility and Malformation	—	—	—	—	—	—	—	—	—	—	—	—
Old Age	—	21	1	4	2	1	—	—	3	1	8	—
Suicide	5	5	5	—	—	—	—	—	—	2	—	1
Unknown Causes	—	—	—	—	—	—	—	—	—	—	—	—
All Other Causes	22	22	10	12	3	—	1	4	2	—	3	9
Total for 1918	8	571	579	353	227	132	43	37	212	29	53	101

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Periperal Septicæmia	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Periperal Diseases	3	3	3	3	3	3	3	3	3	3	3	3	3
Congenital Dehility and Malformation													
Old Age													
Infant	1	1	1	1	1	1	1	1	1	1	1	1	1
Suicide	5	5	5	5	5	5	5	5	5	5	5	5	5
Ill Defined Causes													
All Other Causes	22	22	10	12	8	1	4	2		3	4	9	
Total for 1918	8	571	579	353	227	132	43	37	212	29	53	101	11

[illegible]

DEPARTMENT OF HEALTH  
 MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
 THIRTEENTH WARD.

CAUSES	Under 4 years	White	Colored	Males	Females	Under 1 year	1 and 2 years	2 and 3 years	Under 5 years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total All Causes	4	48	47	24	23	20	12	10	77	26	29	90	120	76
Infantile Paralysis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Idiopathic Meningitis (Cerebro Spinal)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Epidemic Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phthisis (Consumption)	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculosis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cancer (Malignant Tumor)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Septic Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apoplexy Softening of the Brain	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebral Heart Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Lobar	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Broncho	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Respiratory Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of Stomach (Cancer excepted)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhoeal Diseases (under 5 years)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Appendicitis and Typhitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hernia, Intestinal Obstruction	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cirrhosis of Liver	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Urinary Disease and Nephritis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of Women (not Cancer)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Septicemia	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Puerperal Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cuts, Lacerations and Miscellaneous	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Old Age	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Accident	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Homicide	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Suicide	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Undefined Causes	—	—	—	—	—	—	—	—	—	—	—	—	—	—
All Other Causes	1	46	47	24	23	20	12	10	77	26	29	90	120	76
TOTAL for 1918	6	94	94	48	46	40	24	20	154	52	58	180	240	152

STATISTICS SHOWING PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR,  
FOURTEENTH WARD.

CAUSES	14	402	416	308	308	80	89	19	128	18	8	1	1
Total, All Causes	14	402	416	308	308	80	89	19	128	18	8	1	1
Epileptic Paralysis	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fever	-	1	1	1	-	-	-	-	-	-	1	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-
Scalds	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	-	1	1	-	1	-	1	-	1	-	-	-	-
Whooping Cough	1	-	1	-	1	-	-	-	-	1	-	-	-
Diphtheria	-	1	1	-	1	-	-	-	-	1	-	-	-
Measles	1	15	15	6	10	1	3	1	5	1	2	6	2
Edema of Meninges (Cerebro Spinal)	-	1	1	1	-	-	-	-	-	-	-	-	-
Other Tuberculous	-	4	4	9	1	-	-	1	1	-	2	1	-
Cancer, Malignant Tumor	-	26	20	10	16	-	-	-	-	-	3	19	4
Softening of the Brain	-	6	6	6	1	2	1	2	5	-	1	-	-
Stroke, Softening of the Brain	-	21	21	8	13	-	-	-	-	-	11	9	-
Coronary Heart Diseases	-	27	27	12	15	2	1	-	3	1	4	3	10
Pneumonia	1	9	9	4	5	3	1	2	6	-	1	1	7
Pneumonia, Lobar	1	37	38	18	20	2	5	1	8	4	3	14	1
Pneumonia, Interlobar	3	11	14	8	6	6	2	2	10	-	1	2	2
Other Respiratory Diseases	-	9	9	7	2	-	-	1	1	-	3	3	1
Diseases of Stomach (Cancer excepted)	-	4	4	2	2	1	-	-	1	-	2	1	-
Diseases of Intestines	2	21	23	7	16	10	1	3	23	-	-	-	-
Dysentery and Typhoid	-	5	5	3	2	-	-	1	1	1	-	2	2
Obstruction of Intestines	-	2	3	1	2	-	-	-	-	-	1	1	1
Cirrhosis of Liver	-	3	3	1	2	-	-	-	-	-	1	1	1
Jaundice Disease and Nephritis	2	36	32	16	16	-	1	1	2	1	9	13	6
Diseases of Women (not Cancer)	-	1	1	-	1	-	-	-	-	-	-	-	-
Puerperal Septicemia	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Puerperal Diseases	-	6	6	-	6	-	-	-	-	-	4	-	-
Congenital Deformity and Malformation	2	42	44	29	15	-	-	-	14	-	-	-	-
Old Age	-	-	-	-	-	-	-	-	-	-	-	-	-
Accident	-	17	17	10	7	1	-	-	-	1	-	-	3
Lunacy	-	8	3	2	1	-	-	-	-	-	-	-	-
Suicide	-	6	6	5	1	-	-	-	-	-	-	1	-
Undefined Causes	-	45	45	21	24	-	1	1	-	1	2	5	15
All Other Causes	-	-	-	-	-	-	-	-	-	-	-	-	-

DEPARTMENT OF PUBLIC AFFAIRS

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MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR.  
FIFTEENTH WARD.

CAUSES	Yel- low	Col- ored	White	Total deaths	Males	Fe- males	Un- der 1 Year	1 and 2 Un- der 21	2 and 5 Un- der 5	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total, All Causes	33	186	219	102	117	27	19	8	45	1	1	1	4	4	
Infantile Paralysis															
Typhoid Fever		1	1		1								1		
Malaria															
Smallpox															
Measles															
Scarlet Fever															
Whooping Cough	1		1	1	1		1		1						
Diphtheria		1	1	1	1		1		1						
Epidemic Meningitis (Cerebro Spinal)	1	12	13	5	8	1		2	5	1	1			4	
Other Epidemic Diseases															
Tuberculous Meningitis	1	2	3	3	3	1		1	2		1	1		4	1
Other Tuberculosis	1	1	2	1	1						1	1			
Cancer, Malignant Tumor	1	12	13	4	9									9	
Simple Meningitis		3	3	3				1			1				
Organic Heart Diseases	2	21	23	7	16						1		1	3	6
Bronchitis	1	3	4	3	2	1	1		2					1	1
Pneumonia, Lobar	3	8	11	7	4			1	1						1
Pneumonia, Broncho	2	9	11	6	5	1	4	2	7		1			2	
Other Respiratory Diseases	1	2	3	3									1		
Diarrhoeal Diseases (Under 5 years)	3	6	9	5	4	9			9						
Appendicitis and Typhitis	1	5	6	2	4						1	1	3	1	
Hepatic Intestinal Obstruction		1	1	1	1								1		
Pyloric Disease and Nephritis	1	12	13	7	6						1	1	4	4	1
Puerperal Septic															
Other Puerperal Diseases															
Congenital Deblity and Malformation	3	10	13	5	8	13					13				
Old Age		3	3	3											3
Accident	1	10	11	4	7	1	1			2	2				
Stroke		1	1	1											
Indefined Causes															
All Other Causes	1	25	26	13	13		1			1		4	6	8	7
Totals for 1918	1	43	281	325	166	159	42	24	10	70	13	36	84	65	51

# MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE, AND COLOR SIXTEENTH WARD.

CAUSES	Year allowed	Colo- red	Whites	Total	Males	Females	Under 1	1 and 2 Under	2 and Under	5 Under	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	5	281	286	134	152	31	4	6	42	14	15	64	80	71	
Infantile Paralysis															
Typhoid Fever															
Malaria															
Smallpox															
Measles															
Scarlet Fever															
Whooping Cough															
Diphtheria		7	7	3	4			2	2	6					
Influenza		13	13	3	10	1			1		2	8	1	1	
Epidemic Meningitis (Cerebro Spinal)															
Other Epidemic Diseases															
Pneumonia of Lungs (Consumption)															
Pneumonia of Lungs															
Febrile Tuberculosis		2	2	2										1	1
Cancer, Malignant Tumor		23	23	11	12									13	10
Simple Meningitis															
Apoplexy, Softening of the Brain		16	16	9	9									8	10
Organic Heart Diseases		41	41	21	20									17	15
Pneumonia, Lobar	1	1	2	2											
Pneumonia, Lobar	1	21	22	14	8	1		1	2	1	4	18	1	1	1
Pneumonia, Lobar								1	4						
Other Febrile Infectious Diseases															
Dysentery, Stomach, Catarrhs, etc.															
Dysentery Diseases (under 5 years)															
Diarrhoeas and Dysentery									1	1					
Intestinal Obstruction															
Obstruction of Liver															
Bright's Disease and Nephritis															
Diseases of Women (not Cancer)											1		5	15	10
Puerperal Septicæmia															
Other Puerperal Diseases															
Congenital Debility and Malformation															
Old Age															
Accident															
Homicide															
Suicide															
Undefined Causes															
All Other Causes	1	38	39	18	21	1	1	2	4	1			8	11	15
Total			47	48	24	24	14	11	17	7	10	40	152	113	91

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
NON-RESIDENTS

CAUSES	De- cades	Co- lored	White	Inf- ants	Male	Female	Un- der 5	1 and over	2 and over	Un- der 5	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
ALL CAUSES	1	8	297	306	180	126	24	4	6	34	16	30	84	10	31
Infective Diseases				1	1								1		
Typhoid Fever															
Malaria															
Scarlet Fever															
Smallpox															
Measles															
Whooping Cough															
Diphtheria															
Tuberculosis			8	8	4	4			1	1			6		
Tuberculous Meningitis			1			1						1			
Other Epidemic Diseases						1								3	
Tuberculous Meningitis		1	3	4	2	2									
Cancer, Malignant Tumor			31	31	17	14							5	31	5
Simple Meningitis			1	1	1								1		
Apoplexy, Softening of the Brain		1	11	12	5	7							1	6	5
Organic Heart Diseases			26	30	19	7	1			1		1	3	1	19
Diseases of the Lungs		2	26	28	12	16	1	1		2	2	5	14	5	
Pneumonia			6	6	2	4	1	2		3			1	2	
Other Respiratory Diseases			3	3	2	1						1	1	1	
Diseases of the Stomach (Cancer excepted)				7	6	1						1	1	5	
Diarrhoeal Diseases (under 5 years)			5	5		5	5			5					
Appendicitis and Typhlitis			8	8	2	6			1	1	1		2	2	1
Hæmorrhage, Intestine, Obstruction		1	5	6	4	2			1	1	1		1	2	1
Cirrhosis of Liver			3	3	1	2								2	1
Bright's Disease and Nephritis	1		27	28	14	14							4	19	5
Diseases of Women (not Cancer)			1	1		1							1		
Puerperal Septicæmia			2	2		2						1	1		
Other Puerperal Diseases			6	6		6						1	5		
Congenital Debility and Malformation			14	14	7	7	14			14					
Old Age															
Accidents		9	47	49	45	4			1	1	8	9	27	7	3
Homicide		1	2	3	3							3			
Suicide			2	2	2								1	1	
Infectious Causes															
All Other Causes			10	12	26	15		1	1	2	1	5	10	18	6
Totals for 1938		91	433	454	260	194	42	5	3	50	10	48	171	123	59

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR.  
UNKNOWN ADDRESSES AND UNIDENTIFIED PERSON

CAUSES	Yes	Co- ored	White	Total	Males	Fe- males	Un- der 1 Year	1 and 2 Un- der 2	2 and 5 Un- der 5	5 to 14	15 to 64	65 to over
Enteric Parasites	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid fever	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-
Scrub pox	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet fever	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	1	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	2	3	2	1	-	-	-	-	2	1
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	2	2	2	-	-	-	-	-	-	1
	-	-	1	1	1	-	-	-	-	-	1	-
Organic Heart Diseases	-	1	10	11	7	4	1	-	-	1	1	4
Coronary, Lobar	-	-	2	2	2	-	-	-	-	-	-	1
Pneumonia, Broncho	-	-	-	-	-	-	-	-	-	-	-	-
Other Respiratory Diseases	-	-	2	2	1	1	-	-	-	-	-	2
of Stomach (Cancer excepted)	-	-	1	1	-	1	-	-	-	-	-	-
of Intestines (under 5 years)	-	8	1	4	1	3	4	-	-	4	-	-
of Liver	-	-	-	-	-	-	-	-	-	-	-	-
Intestinal Obstruction	-	-	-	-	-	-	-	-	-	-	-	-
Disease and Nephritis	-	1	21	22	11	11	-	-	-	-	4	8
Diseases of Women (not Cancer,	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Septicæmia	-	-	-	-	-	-	-	-	-	-	-	-
Other Puerperal Diseases	-	-	-	-	-	-	-	-	-	-	-	-
Congenital Deformity and Malformation	-	-	-	-	-	-	-	-	-	-	-	-
Old Age	-	1	1	1	-	1	-	-	-	-	-	1
	-	1	10	11	10	-	-	-	-	-	1	7
	-	-	2	2	2	-	-	-	-	-	-	1
	-	1	8	9	6	4	-	1	-	1	-	1
Totals for 1913	-	18	162	180	121	59	8	1	-	8	4	65



MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
JANUARY, 1919

CAUSES	Yel low	Col ored	White	Total	Males	Females	Under 1 Year	1 and 2 Under 2	2 and 4 Under 4	Under 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	1	53	709	765	388	377	106	26	40	172	31	22	202	153	138
Infantile Paralysis															
Typhoid Fever															
Malaria															
Scarlat. Tox.															
Measles			1	1				1		1					
Scarlat. Fever			2	2	1	1			1	1	1				
Whooping Cough															
Diphtheria			3	3	2	3		1	2	3	1	1			
Influenza		5	107	112	38	74	3	5	10	18	8	19	50	13	4
Epidemic Meningitis (Cerebro Spina.)			2	2		2	2			2					
Other Epidemic Diseases															
Tuberculosis of Lungs (Consumption)	1	7	51	59	37	22				1	2	15	31	11	2
Tuberculous Meningitis			3	3	2	1	1								
Other Tuberculosis			4	4	3	1			1	1			2	1	
Cancer Malignant Tumor		2	34	36	14	22						1	6	18	12
Septic Meningitis			6	6	5	1	2	1	2	5	1				
Apoplexy Softening of the Brain			42	42	19	23								17	25
Organic Heart Diseases	1		73	73	29	44	3		1	4	4	4	7	23	31
Bronchitis	3		16	19	9	10	11	1	3	15			1		3
Pneumonia, Lobar	9		90	99	55	44	2	4	3	9	6	15	57	13	5
Pneumonia Broncho	7		41	48	28	20	14	7	7	28		2	12	3	3
Other Respiratory Diseases	1		7	8	6	2							1	5	2
Diseases of Stomach (Cancer excepted)			4	4	4		1			1			2	1	
Diarrhea Diseases (under 5 years)	1		11	14	8	6	10	1	3	14					
Appendicitis and Typhoid			3	3	2	1			1	1	1			1	
Hepatic Intestine Obstruction	2		2	4	1	3							2	2	
Cirrhosis of Liver			4	4	1	3							1	2	1
Kidney Disease and Nephritis	6		48	54	28	26	1	1		2		1	9	22	29
Diseases of Women (not Cancer)															
Puerperal Septicemia															
Other Puerperal Diseases			3	3		3						2	1		
Congenital Deformity and Malformation	5		47	52	32	20	52			52					
Old Age			4	4	2	2									4
Accident			39	39	25	14	1	2	6	9	6	3	7	4	19
Homicide	1		2	3								2	1		
Suicide			6	6	4	2						1	2	3	
Undefined Causes															
All Other Causes		5	45	50	30	20	3	2		5	1	3	11	14	16
Totals for January, 1918		12	579	621	314	307	87	26	22	135	14	32	114	170	156

The death rate for the month was 21.1 per 1,000 of population, as against 21.1 for the previous month. The present population of Newark is estimated for these calculations at 430,000. The death rate for the month of January, 1918, was 18.0, estimated population, 415,000.

# MORTALITY FROM PRINCIPAL CAUSES OF DEATH IN SAN ANTONIO, TEXAS, FEBRUARY, 1919

CAUSES	Age under 4	Colored	White	Total	Males	Females	Under 1 Year	1 and Under 1 Year	2 and Under 1 Year	Un- der 5	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total	1	4	8	13	7	6	171	1	1	96	12	41	8	41	10
Infectious Diseases	-	-	1	1	-	-	-	-	-	-	-	-	-	1	-
Scarlet Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	-	-	1	1	-	-	-	-	1	1	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	7	7	2	5	1	1	2	4	-	-	-	-	-
Tuberculosis	-	-	2	2	2	2	1	1	1	1	-	-	-	-	-
Epidemic Meningitis (Cerebro spinal)	-	1	2	3	2	1	-	1	-	1	-	-	-	-	-
Other Epidemic Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculous Meningitis	1	-	4	5	3	2	1	1	-	2	1	1	-	-	-
Other Tuberculosis	-	2	6	8	5	3	-	-	-	-	-	-	-	1	1
Cancer, Malignant Tumor	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-
Simple Meningitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apoplexy, Softening of the Brain	-	-	24	24	10	14	-	-	-	-	-	-	-	-	1
Organic Heart Diseases	-	1	45	46	19	27	1	-	-	1	1	-	-	4	-
Bronchitis	-	-	11	11	7	4	4	1	1	6	-	-	-	1	3
Pneumonia, Lobar	-	11	86	97	58	39	2	7	1	10	9	-	-	-	-
Pneumonia, Broncho	-	4	30	34	17	17	6	8	1	17	1	-	-	1	2
Other Lung Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery, Bacillary	-	-	-	-	-	-	-	-	-	3	-	-	-	1	1
Dysentery, Amebic	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Alcoholism and Drunkenness	-	-	1	1	-	-	-	-	-	12	-	-	-	-	-
Ill-effects of Intemperance	-	1	1	2	2	-	1	-	-	1	-	-	-	1	1
Consumption of Food	-	1	4	5	-	-	-	-	-	-	-	-	-	1	-
Other Diseases, Nephritis	-	2	43	45	21	25	-	-	-	-	1	2	4	4	3
Dysentery, Bacillary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diarrhea, Nephritis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Communicable Diseases and Miscellaneous	-	3	17	20	7	13	4	-	-	20	-	2	4	-	-
Accident	-	1	4	5	1	4	1	-	3	4	2	2	5	4	2
Homicide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stomach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ill-defined Causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Other Causes	-	4	59	63	32	31	6	-	-	6	-	-	-	25	74
Total for February 1918	-	-	-	-	-	-	-	-	-	-	13	-	-	5	-

At rate for 1918 it was 15 per 1,000. For 1919, the estimated rate for the month of February, 1918, was 16.6, estimated population, 415,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH, BY SEX, AGE AND COLOR  
MARCH, 1919

CAUSES	Yel. low	Col- ored	White	Total deaths	Males	Females	Un- der 1 Year	1 and Un- der 2	2 and Un- der 5	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total, All Causes	8	51	584	638	330	308	94	27	27	145	29	45	48	12
Infantile Paralysis										1				
Typhoid Fever			1	1	1									
Malaria														
Smallpox														
Measles														
Scarlet Fever			2	2	1	1		1		1				
Whooping Cough														
Diphtheria			11	11	7	4								
Influenza	1	7	64	72	39	33	3		5	6	9	12	8	9
Epidemic Morbidity (Scarlet Spots)			3	3	3			1		1		1	1	
Other Epidemic Diseases			1	1	1	1	1							
Tuberculosis of Lungs (Consumption)	1	1	67	69	43	26					2	9	32	22
Tuberculous Meningitis		1	7	8	7	1	1	4	1	6	1	1		
Other Tuberculosis														
Cancer, Malignant		1	38	39	18	21							7	21
Simple Meningitis		1	4	5	4	1	1		1	2	2		1	
Apoplexy Softening of the Brain	1		25	26	16	10							3	9
Organic Heart Diseases			46	46	18	28		1		1	2	1	4	19
Bronchitis		4	14	18	9	9	7	2	2	11		1	8	3
Pneumonia (Lobar)		9	49	58	31	27	13	9	8	25	2	3	3	1
Pneumonia (Broncho)		8	34	42	27	15	13	9	8	25	2	3	3	4
Other Respiratory Diseases			7	7	3	4				3		1		3
Diseases of Stomach and Intestines			8	8	3	5	1			1	1			1
Diseases of Liver and Gallbladder			16	16	8	8	3			16				
Appendicitis and Typhitis			3	3	2	1						1	1	1
Hepatitis and Cirrhosis			4	4	1	3	1		1					
Cirrhosis of Liver			5	5	4	1								
Biliary Diseases and Nephritis			39	39	19	20	1			1	1	3	14	18
Diseases of Women (not Cancer)			2	2		2						1	1	
Puerperal Septicemia														
Other Puerperal Diseases		1	7	8		8						1	7	
Congenital Deformity and Malformation		1	28	29	16	13	9			30				
Old Age			2	2	1	1								2
Accident		1	25	26	21	5	1	1	2	5	3		9	4
Homicide			1	1		1							1	
Suicide			9	9	6	3						2	6	1
Undefined Causes														
All Other Causes		8	57	65	37	28	7	1	1	9	2	6	11	12
TOTAL IN MARCH 1918			649	748	378	370	112	39	35	187	29	64	162	178

The death rate for the month was 17.8 per 1,000 of population, as against 15.9 for the previous month. The present population of Newark is estimated for these calculations at 430,000. The death rate for the month of March, 1918, was 21.1; estimated population, 415,000.

**MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR,  
APRIL, 1919.**

CAUSES	Col- ored	White	Total	Males	Females	Under 1 Year	1 and under 2	2 and under 5	Un- der 15 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total All Causes	38	435	468	254	204	60	11	20	102	90	24	112	123	87
Infantile Paralysis											1			
Typhoid Fever		1	1		1									
Scarlet Fever	1	3	4	3	1		1	1	2	1		1		
Diphtheria		7	7	4	3		2	5	7					
Epidemic Meningitis (Cerebro Spinal)	3	21	24	15	9				5	1	3	11	2	2
Tuberculous Meningitis		1	1	1		1			1					
Other Tuberculosis														
Cancer, Malignant Tumor	1	34	35	17	18							6	19	10
Simple Meningitis		1	1	1		1			1				10	12
Acute Inflammation of the Brain	2	22	24	8	16								17	7
Organic Heart Disease	2	12	14	9	5	5	2	2	9				2	1
Pneumonia, Lobar	4	45	49	35	14			4					4	3
Pneumonia, Broncho	3	13	16	6	10	5	1	2	8			4	8	1
Other Respiratory Diseases		5	5	4	1		1	1	2	1			1	1
Diseases of Stomach (Cancer excepted)		1	1	1										
Gastrointestinal Diseases (under 5 years)	1	14	15	8	7	11	4		15					1
Appendicitis and Typhlitis		3	3	1	2									
Hernia and Obstruction	1	4	5	2	3							1	2	2
Diabetes Mellitus	1	1	2										1	1
Heart Disease and Nephritis	2	42	44	25	19			1	1	2	1	4	19	17
Septicemia		1	1		1						1			
Other Puerperal Diseases		4	4		4									
Organic Debility and Malformation	2	23	25	14	11				25					
Old Age														
Accident	1	27	28	16	12	1	2							4
Homicide		1	1		1								1	
Suicide		10	10	6	4								7	3
Undefined Causes														
All Other Causes	4	44	48	27	21	4		3	7	1	3	5	20	12
Total for Apr. 1918	1	49	50	29	21	7	13	41	90	34	12	134	64	102

The death rate for the month was 13.0 per 1000 of population, as against 17.8 for the previous month. The present population of Newark is estimated at 430,000. The death rate for the month of April, 1918, was 19.3, estimated population, 415,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
MAY, 1919.

CAUSES	Ye low	Co col.	White	Total Deaths	Males	Females	Under 1 Year	Un- der 1 Un- der 2	1 and 2 and Un- der 5	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	1	2	88	476	210	266	52	12	9	73	19	26	48	113	55
Infantile Paralysis															
Epidemic Fever															
Malaria															
S. A. D. N.															
Measles															
Scarlet Fever															
Whooping Cough		1		1		1					1				
Diphtheria			2	2		2					2				
Influenza			6	6	3	3			1	1	1		3		1
Epidemic Meningitis (Cerebro Spina.)			2	2	1	1			1	1	1				
Other Epidemic Disease															
Tuberculosis of Lungs (Consumption)		7	40	47	32	15		1		1	1	12	22	11	
Tuberculous Meningitis			4	4	1	3	1		3						
Other Tuberculosis		1	3	4	3	1	3			3		1			
Cancer, Malignant Tumor			29	29	11	18							2	14	13
Simple Meningitis			1	1		1						1			
Apoplexy, Softening of the Brain		1	24	25	13	12							1	14	10
Diseases of Heart		3	41	44	21	23					2	1	7	14	19
Brain Aneurysm		1	4	5		5	1	2	1	4					1
Pneumonia, Lobar		2	29	31	18	13	1	4	1	6	3	2	12	8	1
Pneumonia, Broncho			12	12	4	8	5						1	2	4
Other Respiratory Diseases			5	5	2	3		1		1			1	2	
Diseases of Stomach (Cancer excepted)			9	9	2	7							1	6	2
Diseases of Intestines (under 5 years)		1	6	7	6	1	1								
Acute Typhoid Typhilitis			4	4		4				1			2	1	
Chronic Intestinal Obstruction			1	1	2	2							1	1	
Chronic Intestinal Obstruction			2	2	1	1								2	
Bug's Disease and Septic		3	42	46	24	22	2			2		1	6	15	22
Diseases of Women and Cancer			4	4		4							2	1	1
Diseases of Children															
Other Respiratory Diseases		1	4	5		5						1	4		
Cancer, Malignant Tumor		1	29	30	17	13	30			30					
Age		1	1	2		2									2
Age		1	30	31	23	8		2	1	3	5	4	10	5	4
Male	1		3	4		4						1	2	1	
Female			2	2	1	1							2		
Un-defined Causes															
All Other Causes			50	50	23	27	7	1	1	5	2	2	10	16	15
Totals for May, 1918	1	36	440	527	292	235	97	27	21	155	16	17	114	124	101

The death rate for the month was 11.6 per 1,000 of population as against 13.0 for the previous month. The present population of Newark is estimated for these calculations at 430,000. The death rate for the month of May, 1918, was 15.2; estimated population, 415,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH IN NEWARK, NEW JERSEY,  
JUNE 1918

CAUSES	Yr. a	Col	White	Total	Males	Females	Un- der 1 Year	1 and 2 der 2	2 and 5 der 5	5 years	10 years	15 years	20 years	25 years	30 years	35 years	40 years	45 years	50 years	55 years	60 years	65 years	70 years	75 years	80 years	85 years	90 years	95 years	100 years	
Infantile Paralysis																														
Typhoid Fever																														
Malaria																														
Scarlet Fever			1	1		1			1																					
Diphtheria																														
Whooping Cough			2	2		2																								
Measles			2	2	1	1																								
Smallpox			1	1	1		1																							
Other Tuberculosis			1	1		1																								
Cancer, Malignant Tumor			4	4	4																									
Simple Meningitis			1	1		1																								
Apoplexy Softening of the Brain			45	46	29	17																								
Organic Heart Diseases			1	1		1																								
Bronchitis			1	1		1																								
Lobar			6	6	5	1																								
Broncho			4	5	5		1		2																					
Respiratory Diseases																														
Diseases of Stomach (Cancer excepted)			5	6	4	2			1		1																			
Diarrhoeal Diseases (under 5 years)			21	21	12	9	17	3	1		21																			
Appendicitis and Typhitis			8	8	6	2																								
Hernia, Intestinal Obstruction			2	2	1	1	1				1																			
Diseases of Liver																														
Bright's Disease and Nephritis			41	43	21	22		1			1	1																		
Diseases of Women (not Cancer)																														
Puerperal Septicæmia			3	3		3																								
Other Puerperal Diseases			4	4		4																								
Eclampsia, etc.			1	1		1																								
Age			4	4	2	2																								
Violence																														
Homicide																														
Suicide			4	4	3	1																								
Ill defined Causes																														
All other Causes			4	4																										
<b>Total</b>	1	41	42	83	246	190	28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	

The present population of Newark is estimated for these calculations at 430,000. The death rate for the month of June, 1918, was 11.8, estimated population, 415,600.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE, AND COLOR  
JULY, 1919.

CAUSES	Yel. low	Co. ored	White	Total deaths	Males	Fe- males	Un- der 1 Year	1 and 2 Un- der 3	2 and 3 Un- der 5	Un- der 5 Years	5 to 14	15 to 24	25 to 44	45 to 64	65 and over
Total, All Causes	1	29	309	399	195	204	99	12	12	14	2	10	15	81	7
Infantile Paralysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet Fever	-	1	1	2	1	1	1	-	1	2	-	-	-	-	-
Whooping Cough	-	1	-	1	1	-	-	1	-	1	-	-	-	-	-
Diphtheria	-	1	1	2	1	1	-	-	-	-	2	-	-	-	-
Inf. of Th.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epidemic Meningitis (not to 15)	-	-	1	1	-	-	1	-	-	1	-	-	-	-	-
Other Epidemic Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis of Lungs (cons. & gen.)	-	2	37	39	-	39	1	-	-	1	2	-	-	6	-
Tuberculosis Mel. gls.	-	1	2	3	-	3	1	-	1	2	-	-	-	1	-
Other Tuberculosis	-	1	4	5	4	1	-	1	1	2	-	1	-	2	-
Cancer, Malignant Tumor	-	-	34	34	17	17	-	-	-	-	-	-	-	17	14
Simple Mel. gls.	-	-	1	1	-	-	-	-	1	1	1	-	-	1	-
Apoplexy, Softening of the Brain	-	-	3	3	1	2	-	-	-	-	-	-	-	3	14
Organic Heart Diseases	-	-	33	33	19	14	2	-	-	2	6	1	8	8	13
Bronchitis	-	-	4	4	3	1	2	-	1	3	-	-	-	1	-
Pneumonia, Lobar	-	2	6	8	8	5	2	1	1	4	1	1	-	1	1
Pneumonia, Broncho	-	1	2	3	2	1	2	1	-	3	-	-	-	-	-
Other Respiratory Diseases	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-
Diseases of Stomach & Intestines	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-
Diseases of Genito-Urinary Organs	-	7	48	55	33	22	49	5	1	30	-	-	-	-	-
Varicella and Typh.	-	-	10	10	5	5	-	-	4	4	2	2	2	2	-
Hernia, Intestina, Obstruction	-	1	8	9	3	6	2	-	-	2	1	1	1	2	2
Cirrhosis of Liver	-	-	4	4	3	1	-	-	-	-	1	-	-	1	-
Bright's Disease and Nephritis	-	1	25	27	16	11	-	-	-	-	-	-	6	12	-
Diseases of Women (not Cancer)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Puerperal Septicæmia	-	-	2	2	-	2	-	-	-	-	-	-	2	-	-
Other Puerperal Diseases	-	-	3	3	-	3	-	-	-	-	-	-	3	-	-
Congenital Debility and Malformation	-	1	80	81	14	17	31	-	-	31	-	-	-	-	-
Old Age	-	-	4	4	2	2	-	-	-	-	-	-	-	-	4
Accident	-	1	29	30	17	13	-	1	2	3	12	5	5	4	1
Violence	-	2	1	3	3	-	-	-	-	-	-	-	3	-	-
Suicide	-	-	6	6	3	3	-	-	-	-	-	-	4	1	1
Undefined Causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Other Causes	-	4	43	49	29	20	3	1	-	4	1	2	9	20	13
<b>Total, All Causes</b>	<b>1</b>	<b>36</b>	<b>443</b>	<b>481</b>	<b>224</b>	<b>257</b>	<b>123</b>	<b>23</b>	<b>23</b>	<b>168</b>	<b>16</b>	<b>29</b>	<b>84</b>	<b>108</b>	<b>79</b>

The death rate for the month was 20.9 per 1,000 of population as against 14.4 for the previous month. The estimated population of New York as estimated for these calculations is 440,000. The death rate for the month of July, 1918, was 13.4, estimated population, 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
AUGUST, 1919

CLASS	All Deaths	White	Colored	Male	Female	Under 5 Years	5 to 14 Years	15 to 24 Years	25 to 44 Years	45 to 64 Years	65 and over
Total	4	4	0	3	1	1	1	1	1	0	0
Measles	1	1	0	1	0	0	0	0	0	0	0
Scarlet Fever	1	1	0	1	0	0	0	0	0	0	0
Whooping Cough	1	1	0	2	0	0	0	0	0	0	0
Diphtheria	1	1	0	4	0	0	0	0	0	0	0
Epidemic Meningitis (Cerebro Spinal)	1	1	0	1	0	0	0	0	0	0	0
Other Epidemic Diseases	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis of Lungs (Consumption)	4	38	32	19	13	0	0	0	0	0	0
Tuberculous Meningitis	0	3	3	1	0	0	0	0	0	0	0
Other Tuberculosis	3	3	0	4	0	0	0	0	0	0	0
Cancer, Malignant Tumor	1	29	30	19	1	0	0	0	0	0	0
Simple Meningitis	1	4	5	4	1	0	0	0	0	0	0
Apoplexy Softening of the Brain	1	18	18	6	12	0	0	0	0	0	0
Organic Heart Diseases	2	28	30	14	16	0	0	0	0	0	0
Bronchitis	0	2	2	1	1	0	0	0	0	0	0
Pneumonia, Lobar	0	8	8	4	4	0	0	0	0	0	0
Pneumonia, Broncho	2	3	5	4	1	0	0	0	0	0	0
Other Respiratory Diseases	1	2	3	2	1	0	0	0	0	0	0
Diseases of Stomach and Intestines	0	4	4	0	0	0	0	0	0	0	0
Gastrointestinal Diseases (under 5 years)	5	50	55	28	27	47	4	4	35	0	0
Appendicitis and Typhitis	1	4	5	2	3	0	0	0	0	0	0
Hernia, Intestinal Obstruction	0	3	2	3	0	0	0	0	0	0	0
Cirrhosis of Liver	0	3	3	3	0	0	0	0	0	0	0
Bright's Disease and Nephritis	1	27	25	10	12	0	0	0	0	0	0
Diseases of Women and Children	1	1	2	2	0	0	0	0	0	0	0
Puerperal Septicemia	1	1	1	1	0	0	0	0	0	0	0
Other Puerperal Diseases	0	1	1	1	0	0	0	0	0	0	0
Congenital Debility and Malformation	2	17	19	7	12	19	0	0	0	0	0
Old Age	0	3	3	2	1	0	0	0	0	0	0
Accidents	0	17	20	15	5	1	2	1	4	3	2
Homicide	0	1	1	1	0	0	0	0	0	0	0
Suicide	0	3	3	2	1	0	0	0	0	0	0
Undefined Causes	0	0	0	0	0	0	0	0	0	0	0
All Other Causes	0	3	45	40	27	22	2	4	2	3	9
Total for August, 1919	4	422	440	250	199	108	27	11	144	18	5

The death rate for the month was 9.5 per 1,000 of population, as against 10.9 for the previous month. The present population of Newark is estimated at 440,000. The death rate for the month of August, 1918, was 12.5, estimated population, 430,000.



MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
SEPTEMBER, 1919

CAUSES	Yel ow	Col ored	White deaths	Total	Males	Fe- males	Un- der 1 Year	Un- der 5	5 and under 10	10 to 14	15 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	30	311	340	651	347	304	64	15	10	69	16	17	54	94
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fever	-	-	3	3	1	2	-	-	-	2	1	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scarlet	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stool Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	2	2	1	1	-	-	2	2	-	-	-	-
Influenza	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epidemic Meningitis (Cerebro Spinal)	-	-	2	2	1	1	-	-	-	2	-	-	-	-
Other Infectious Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis of Lungs (Consumption)	3	22	25	16	9	7	-	-	1	-	5	11	7	1
Tuberculosis Meningitis	-	1	1	1	-	-	-	-	1	-	-	-	-	-
Other Tuberculosis	1	2	3	2	1	-	-	-	-	1	-	-	1	-
Cancer, Malignant	1	31	32	16	16	-	-	-	-	-	-	3	22	7
Simple Meningitis	-	1	1	1	-	-	-	-	1	1	-	-	-	-
Apoplexy, Softening of the Brain	3	15	18	6	12	-	-	-	-	-	-	2	10	6
Organic Heart Diseases	1	40	41	24	17	-	-	-	-	3	2	3	19	14
Stroke	-	5	5	2	3	4	-	-	-	4	-	1	-	-
Pneumonia, Total	4	7	11	4	7	2	-	2	4	-	2	2	3	-
Pneumonia, Local	2	6	8	4	4	2	3	1	6	1	-	-	-	1
Other Respiratory Diseases	-	4	4	2	2	-	-	-	-	-	-	-	-	2
Diseases of Stomach, Cancer excepted	-	9	9	7	2	-	-	-	-	-	-	1	1	-
Diseases of Intestines, Cancer excepted	7	24	31	20	14	25	8	1	34	-	-	-	-	-
Diseases of Kidneys	-	3	3	1	1	-	-	-	-	-	-	1	1	-
Hernia, Intestinal Obstruction	-	2	2	1	1	-	-	-	-	-	-	-	1	1
Cirrhosis of Liver	-	3	3	2	1	-	-	-	-	-	-	-	1	-
Diseases of Gallbladder and Bile Ducts	-	37	38	23	15	-	-	-	-	3	2	8	8	17
Diseases of Women (not Cancer)	1	2	3	-	8	-	-	-	-	-	-	-	-	-
Puerperal Septicemia	-	2	2	-	2	-	-	-	-	-	-	2	-	-
Other Puerperal Diseases	-	1	1	-	1	-	-	-	-	-	-	1	-	-
Colic, Intestinal and Malnutrition	2	90	92	19	9	26	-	-	28	-	-	-	-	-
Old Age	-	2	2	-	2	-	-	-	-	-	-	-	-	-
Accident	1	18	19	15	4	1	2	2	5	3	2	2	4	3
Homicide	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Suicide	-	3	3	1	2	-	-	-	-	-	-	2	1	-
Undeclared Causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
All Other Causes	2	42	44	25	19	1	1	1	3	-	3	9	13	16
Total for September 1918	34	49	44	247	147	80	17	94	191	10	33	65	106	79

The death rate for the month was 9.3 per 1000 of population, as against 9.5 for the previous month. The present population of Newark is estimated for these calculations at 440,000. The death rate for the month of September, 1918, was 13.4 estimated population, 420,000.



MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR,  
NOVEMBER, 1919

CAUSES	Under 15	15 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 to 84	85 to 94	95 and over	Total
Total All Causes	26	47	39	71	84	65	14	10	97	20	309
Infantile Pathoses	—	—	—	—	—	—	—	—	—	—	—
Epidemic Typhus	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—
Influenza	—	—	—	—	—	—	—	—	—	—	—
Epidemic Meningitis (Cerebro Spinal)	—	—	—	—	—	—	—	—	—	—	—
Other Epidemic Diseases	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis of Lungs (Consumption)	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculosis	—	—	—	—	—	—	—	—	—	—	—
Cancer, Malignant Tumor	—	—	—	—	—	—	—	—	—	—	—
Simple Meningitis	—	—	—	—	—	—	—	—	—	—	—
Apoplexy, Softening of the Brain	—	—	—	—	—	—	—	—	—	—	—
Organic Heart Diseases	—	—	—	—	—	—	—	—	—	—	—
Eclampsia	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Lobar	—	—	—	—	—	—	—	—	—	—	—
Pneumonia, Broncho	—	—	—	—	—	—	—	—	—	—	—
Other Respiratory Diseases	—	—	—	—	—	—	—	—	—	—	—
Diseases of Stomach (Cancer excepted)	—	—	—	—	—	—	—	—	—	—	—
Diarrhoeal Diseases (under 5 years)	—	—	—	—	—	—	—	—	—	—	—
Appendicitis and Typhoid	—	—	—	—	—	—	—	—	—	—	—
Hernia, Intestinal Obstruction	—	—	—	—	—	—	—	—	—	—	—
Cirrhosis of Liver	—	—	—	—	—	—	—	—	—	—	—
Bright's Disease and Nephritis	—	—	—	—	—	—	—	—	—	—	—
Diseases of Women and Children	—	—	—	—	—	—	—	—	—	—	—
Unnatural Deaths	—	—	—	—	—	—	—	—	—	—	—
Unnatural Deaths	—	—	—	—	—	—	—	—	—	—	—
Congenital Debility and Malformation	—	—	—	—	—	—	—	—	—	—	—
Old Age	—	—	—	—	—	—	—	—	—	—	—
Accident	—	—	—	—	—	—	—	—	—	—	—
Homicide	—	—	—	—	—	—	—	—	—	—	—
Suicide	—	—	—	—	—	—	—	—	—	—	—
Undefined Causes	—	—	—	—	—	—	—	—	—	—	—
All Other Causes	—	—	—	—	—	—	—	—	—	—	—
Totals for November, 1918	50	799	849	445	404	94	43	41	178	9	1113

The death rate for the month was 10.9 per 1,000 of population, as against 10.7 for the previous month. The present population of Newark is estimated at 430,000. The death rate for the month of November, 1918, was 23.7, estimated population, 430,000.

MORTALITY FROM PRINCIPAL CAUSES OF DEATH BY SEX, AGE AND COLOR  
DECEMBER, 1919

CAUSES	Yet aged	Co. aged	White Total	Males	Females	Un- der 1 Year	1 and 2 Un- der 2 Year	2 and 3 Un- der 3 Year	Un- der 5 Years	5 to 14	16 to 24	25 to 44	45 to 64	65 and Over
Total, All Causes	30	436	469	249	217	64	14	10	89	18	20	106	150	16
Infantile Paralysis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typhoid Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Measles	-	-	3	3	9	1	1	1	3	-	-	-	-	-
Scarlet Fever	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	3	3	1	2	-	1	2	1	-	-	-	-
Influenza	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acute Meningitis (Cerebro Spinal)	-	-	3	3	1	2	-	-	1	1	-	1	-	-
Other Epidemic Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculous Meningitis (Consumption)	1	41	4	4	7	1	1	1	1	-	7	24	13	-
Other Tuberculosis	1	4	5	2	3	2	1	1	4	-	-	1	-	-
Cancer, Malignant Tumor	1	31	31	13	18	-	-	-	-	1	-	5	18	8
Stroke, Apoplexy	-	2	2	2	-	1	-	-	1	-	-	1	11	20
Apoplexy, Softening of the Brain	-	2	2	2	-	-	-	-	-	-	-	-	-	-
Organic Heart Diseases	2	56	58	29	32	-	1	1	1	3	7	11	1	21
Bronchitis	1	5	6	4	2	1	2	1	4	-	-	1	-	-
Pneumonia, Lobar	2	28	30	16	12	1	1	1	1	3	-	1	-	-
Pneumonia, Broncho	1	20	21	5	16	6	2	1	5	2	-	4	1	6
Other Respiratory Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diseases of Stomach (Cancer excepted)	-	6	6	5	1	3	-	-	2	-	1	1	1	1
Diarrhoeal Diseases (under 5 years)	1	14	15	8	7	12	2	1	16	-	-	-	-	-
Appendicitis and Typhlitis	-	5	5	5	-	-	-	-	-	-	-	3	2	-
Gonorrhea, Intestinal Obstruction	1	6	7	1	6	-	-	-	-	-	-	2	4	-
Carcinoma of Liver	-	1	1	-	1	-	-	-	-	-	-	-	-	-
Bright's Disease and Nephritis	2	53	55	32	23	-	-	-	-	-	-	10	24	2
Diseases of Women (not Cancer)	-	2	2	-	-	-	-	-	-	-	-	2	-	-
Puerperal Septicemia	-	3	3	-	-	-	-	-	-	-	2	1	-	-
Other Puerperal Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Congenital Debility and Malformation	3	31	34	25	9	84	-	-	84	-	-	-	-	-
Alcohol	-	4	4	2	2	-	-	-	-	-	-	-	-	-
Drugs	-	26	29	23	6	1	-	1	2	4	5	11	4	3
Self	-	1	2	1	1	-	-	-	-	-	-	2	-	-
Suicide	1	3	4	4	-	-	-	-	-	-	1	-	-	-
Unlabeled Causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A. Other Causes	-	6	53	31	28	4	-	2	6	3	3	17	17	13
Totals for December, 1918	48	710	738	307	361	108	18	32	158	32	75	242	340	111

The mortality rate for the month of December, 1919, was 1.1 per 1,000 population as compared with 1.1 for the previous year. The mortality rate for the month of December, 1918, was 21.1, estimated population, 430,000.

## DEATHS IN INSTITUTIONS, ETC., FOR 1919

Newark City Hospital.....	848
St. Michael's Hospital.....	246
Newark Memorial Hospital.. ..	84
St. Barnabas' Hospital.....	79
St. James' Hospital.....	61
Beth Israel Hospital .....	92
Babies' Hospital .....	65
Newark Private Hospital.....	49
Presbyterian Hospital .....	37
Homeopathic Hospital .....	27
Women and Children's Hospital.....	17
Maternity Hospital .....	12
Clinton Private Hospital.....	14
Port Newark Hospital....	3
Essex County Hospital for Insane (Newark residents)	6
Essex County Isolation Hospital, Soho (Newark residents)	165
East End Hospital .....	2
Home for Crippled Children.....	5
Home for Incurables .....	16
Baptist Home .....	3
Arthur Comfort Home .....	6
Florence Crittenden Home .....	1
House of Good Shepherd .....	2
Little Sisters of the Poor (Home for Aged)	47
Alms House, Ivy Hill (Newark residents).....	40
Eye and Ear Infirmary.....	13
Railroad Stations .....	1
Hotels .....	1
Railroad Tracks .....	6
St. Peter's Orphanage.....	1
East Side Day Nursery.....	4
Essex Power Plant .....	1
Heller File Company.....	1

Police Ambulance ...	1
Submarine Boat Corporation..	4
Weequahic Park (lake)....	1
Morris Canal	5
Passaic River .	1
On Streets	14
Bethany Home .	1
St Mary's Orphanage	8
Taxicab .....	1
Branch Brook Park	1
Weequahic Park	1
Meadow Pond .	1
Dentist Office .	1
Holy Angel Day Nursery	1
Cyrus Currier Building	1
Dr. Hippel's Hospital	1

# Mortality Statistics of Newark

## FOR THE YEAR 1919

Including non-resident deaths, arranged to give disease,  
age and sex and according to International Classification,  
compiled by the Division of Vital Statistics,  
Department of Health, Newark, N. J.

## MORTALITY CAUSES ARRANGED AS FOLLOWS:

### MALE

1. General Diseases
2. Nervous System and Organs of Special Sense.
3. Diseases of Circulatory System
4. Diseases of Respiratory System
5. Diseases of Digestive System.
6. Non venereal Diseases of Genito-Urinary System
7. Diseases of Skin and Cellular Tissue
8. Diseases of Bones and Organs of Locomotion
9. Malformations.
10. Old Age
11. External Causes—
  - Suicides
  - Accidents
  - Homicides.
12. Ill defined Diseases.

### FEMALE

1. General Diseases.
2. Nervous System and Organs of Special Sense.
3. Diseases of Circulatory System
4. Diseases of Respiratory System
5. Diseases of Digestive System
6. Non-venereal Diseases of Genito-Urinary System
7. The Puerperal State.
8. Diseases of Skin and Cellular Tissue
9. Diseases of Bones and Organs of Locomotion.
10. Malformations
11. Old Age.
12. External Causes -
  - Suicides
  - Accidents
  - Homicides
13. Ill-defined Diseases



# MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1919

Including non-resident deaths, arranged to give disease and age according to International Classification

CAUSES OF DEATH	Under Age 1	1	2	3	4	Total Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and Over	
Mortality from All Causes	280	47	35	44	19	25	670	8	44	79	65	132	163	91	77	74	55	71	76	70	143	98	53	28	9
I General Diseases	28	4	5	1	5	15	87	2	7	21	43	65	96	89	1	77	79	33	43	43	24	9	6	2	--
II Nervous System and Organs of Special Senses	118	1	7	1	3	6	32	1	3	4	3	7	6	6	8	14	16	28	21	22	19	16	9	--	--
III Diseases of Circulatory System	28	7	1	--	--	--	8	7	6	6	9	1	13	14	17	1	11	2	3	23	24	22	16	11	1
IV Diseases of Respiratory System	22	3	--	--	1	1	111	1	2	8	1	20	32	29	29	24	18	14	16	11	8	11	3	4	1
V Diseases of Digestive System	271	1	29	7	1	1	161	6	3	3	3	6	4	6	13	13	13	7	7	--	3	3	--	--	1
VI Diseases of Genito-Urinary System	341	4	1	2	--	--	7	6	2	3	4	11	16	4	4	29	33	3	46	42	30	10	6	3	--
VII Diseases of Skin and Cellular Tissue	12	2	--	--	--	--	2	--	--	2	2	1	--	1	1	--	--	1	--	2	--	--	--	--	--
VIII Diseases of Bones and Organs of Locomotion	4	--	--	--	--	--	--	--	1	--	1	1	--	--	--	--	--	--	--	--	--	--	--	--	--
IX Malformations	201	190	2	--	--	--	201	--	--	1	--	1	1	--	--	--	--	1	--	--	--	--	--	--	--
X Old Age	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
XI External Causes	28	6	9	4	3	6	28	30	11	14	13	19	24	21	27	23	16	17	11	11	4	4	3	3	3
Suicides	40	--	--	--	--	--	--	--	--	1	1	7	1	5	5	7	3	4	2	--	1	--	--	--	--
Accidents	29	6	9	4	3	6	28	31	11	9	19	11	20	13	20	15	8	1	9	11	3	2	5	--	--
Homicides	10	--	--	--	--	--	--	--	--	4	2	1	1	3	2	1	3	1	--	--	--	--	--	--	--
XII Infectious Diseases	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	1	--	--	--
I GENERAL DISEASES - I ts.	18	4	10	13	5	13	87	22	7	22	43	65	76	80	1	77	79	33	43	43	24	9	6	2	--
Typhoid Fever	4	--	--	--	--	--	--	2	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--
Measles	3	1	1	1	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Scarlet Fever	5	--	1	--	--	1	2	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whooping Cough	3	1	2	--	--	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Diphtheria and Croup	19	--	2	6	--	0	13	5	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Influenza	67	11	2	1	4	--	18	4	1	6	8	16	5	16	6	4	3	--	6	2	--	2	--	--	--



# MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1919—Continued

CAUSES OF DEATH	All	Under	1	2	3	4	Total	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90		
	Ages	1					Under	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	and		
Other General Diseases	2							1	1																		
Alcoholism (Acute or Chronic)	7												1	1		1	1	1	1								
Chronic Lead Poisoning	2												1		1												
II NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE																											
Total	218	15	7		3	6	7	1		4	3	7	5	6	8	14	16	28	25	22	19	16	9				
Epilepsy			1							1	1		1	1		1	2										
Meningitis	22	6	1				1		3		1	2							1								
Cerebrospinal Meningitis	10	3	1	1				1			2	1															
Locomotor Ataxia	5											1					1	1	2								
Other Diseases of Spinal Cord	5															1		2		2							
Cerebral Hemorrhage, Apoplexy	7											1	3	3	11	11	22	20	16	19	16	9					
Paralysis without Specific Cause															1			1									
General Paralysis of the Insane											2									1							
Other Forms of Mental Alienation																	1	1					1				
Epilepsy	8		1				1					1					1		1	2							
Convulsions (under 5 years)	8	7					8																				
Other Diseases of Nervous System	1		2			1	2		1		1		1	1	1		1	1	1								
Diseases of Ears	1										1																
III DISEASES OF CIRCULATORY SYSTEM																											
Total	287	7		1			6	7	6	6	9	1	10	14	12	24	24	20	30	23	34	22	15	11	1		
Pericarditis	1																	1									
Acute Endocarditis	9	6					6	4	1	1		1	1	2	1	1	2	1									
Organic Diseases of the Heart	27	1		1			2	3	5	4	9		8	12	10	17	26	15	26	30	29	11	11	5			
Angina Pectoris	12														1	3	2	1	2		1	2					
Diseases of Arteries: Atherosclerosis, etc.	32															2	4	1	1	2	3	8	4	6	1		
Fibrillation of the Heart	6											1				1			1	1	1	1					
Diseases of Veins	1																	1									



MALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1919--Continued.

CAUSES OF DEATH	All Ages	In				Total Under	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90 and Over
		1	2	3	4		to 9	to 14	to 19	to 24	to 29	to 34	to 39	to 44	to 49	to 54	to 59	to 64	to 69	to 74	to 79	to 84	to 89	
VI DISEASES OF GENITO-URINARY SYS- T. M. (NON-VEREAL)—Total.	311	4	1	2		7	6	4	2	3	4	1	16	14	41	29	33	39	41	42	30	10	6	3
Acute Nephritis	94	2				2	3	1	1	1	3			2	1	2		1	2	1				
Bright's Disease	901		1	2		4	2	2		2	1		11	17	37	36	29	35	34	39	28	10	6	3
Other Diseases of Kidneys	6					1	1		1				2				1							
Diseases of Bladder	10							1							1				3		1			
Diseases of Prostate	10													2				1		1				
VII DISEASES OF SKIN Total	3	2				3				2	2			1	1			1		2				
Eczema	3													1				1		1				
Furunculosis	1																			1				
Acute Abscess	5									1	2	1			1									
Other Diseases of Skin	3	2				3				1														
VIII DISEASES OF BONES, ORGANS OF LOCOMOTION Total	4							1		1	1							1						
Diseases of Bones	4							1		1	1							1						
IX MALFORMATION Total	41	179	2			201																		
Congenital Malformations	14	122	2			104																		
Congenital Deafity	62	62				62																		
Other Causes, Early Infancy	35	36				35																		
X OLD AGE Total	16																		1		4	3	5	3
Senility	16																		1		4	3	5	3
XI EXTERNAL CAUSES—Total	266	6	9	4	3	6	28	30	11	14	22	19	34	21	27	23	16	17	11	11	4	2	6	
NON-NATURAL SUICIDES	60									1	1	7	1	5	5	7	5	4	2		1			
Suicide by Poison	3														1		1	1						
Suicide by Asphyxia	13											2	1	1		2	8	1	1					





FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1919 — *continued*[illegible]



FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1919

CAUSES OF DEATH	All Ages	Under 1	1	2	3	4	Total Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and Over
<b>II. NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE--Total</b>	296	6	5	3	2	2	18	5	2	4	2	4	1	3	6	8	13	17	27	30	33	38	42	9	1
Encephalitis	4			1		1	2			1	1				1										
Meningitis	8	1	2	1	1		5		1	1					1										
Cerebrospinal Meningitis	12	2	1		1	1	5	5		1		1						3	2	4	2				
Other Diseases of Spinal Cord	13	2					2												3	2	4	2			
Cerebral Hemorrhage, Apoplexy	178											1		2	3	7	15	13	14	21	26	30	23	8	1
Paralysis without Special Cause	5															1				1					
General Paralysis of the Insane	1												1												
Other Forms of Mental Alienation	1												1		1				1				1		
Epilepsy	2	1					1				1														
Convulsions (under 5 years)	2		1	1			2														1				
Chorea	1																								
Other Diseases of Nervous System	6		1				1			1		2			1		1								
Diseases of Ears	1								1																
<b>III. DISEASES OF CIRCULATORY SYSTEM--Total</b>	323	5	2	1		2	10	12	7	6	9	8	15	10	11	21	16	16	35	34	39	35	31	12	3
Pericarditis	1												1												
Acute Endocarditis	35	3	2	1		1	7	6	3	2	5	1	3	1	1	1	2	2	1						
Organic Diseases of the Heart	223						2	6	3	4	2	6	11	7	9	13	11	11	28	44	14	38	19	10	2
Angina Pectoris	11															2	1	1	2	3			1	1	
Diseases of Arteries, Arteriosclerosis, etc.	37															1	2	4	2	8	6	11	2	1	
Embolism and Thrombosis	14							1	1			1		2	2	5	1			1					
Diseases of Veins	1					1	1																		
Other Diseases of Circulatory System	1										1														
<b>IV. DISEASES OF RESPIRATORY SYSTEM--Total</b>	373	64	28	12	6	6	116	12	6	7	20	33	30	22	17	11	16	13	20	15	12	9	13	4	1
Diseases of Larynx	3						1	1																	

[illegible]

FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1919 *Continued.*

CAUSES OF DEATH	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and Over
Breast Disease	1				1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Other Diseases of Kidneys	2						1	1												
Uterine Fibroid, Cancer, Etc.	3																			
Other Diseases of Uterus							1	2												
Cysts and Tumors of Ovary												1								
Salpingitis, Other Diseases of Female Genital Organs	2						1	2		1	1				1					
VII THE PUERPERAL STATE Total	4						14	10	11	14	8									
Accidents of Pregnancy	4							1	1	1	2									
Postnatal Hemorrhage							1	1												
Other Accidents of Labor	2						1	1												
Puerperal Septicemia	20						4	5	4	5	2									
Puerperal Convulsions	23						8	2	6	4	2									
Following Childbirth (not otherwise defined)	2								2											
VIII DISEASES OF SKIN Total	4	1			1					1			1	1						
Gangrene	1										1									
Furuncle	1													1						
Acute Abscess	2	1					1								1					
IX DISEASES OF BONES, ORGANS OF LOCOMOTION Total	7				2	1	1		1			1		1						
Diseases of Bones	6	2			2	1	1		1					1						
Diseases of Joints	1																			
X MALFORMATION Total	148	148			148															
Congenital Malformations	8	80			80															
Cracks, etc. Inability	7	57			37															
Other Causes, Early Infancy	61	5			31															

## FEMALE MORTALITY FIGURES FOR NEWARK FOR YEAR 1919--Continued.

CAUSES OF DEATH	All Ages	Un- der 1	1	2	3	4	Total Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and Over
XI. OLD AGE--Total.....	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5	2	5	5	2
Senility.....	19	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	5	2	5	5	2
XII. EXTERNAL CAUSES--Total.....	121	4	4	3	2	3	16	18	3	4	3	9	6	7	9	5	7	7	2	4	6	7	2	4	2
TOTAL SUICIDES.....	16	---	---	---	---	---	---	---	---	1	---	3	---	3	2	3	1	1	1	1	---	---	---	---	---
Suicide by Poison.....	4	---	---	---	---	---	---	---	---	---	---	1	---	1	---	2	---	---	---	---	---	---	---	---	---
Suicide by Asphyxia.....	9	---	---	---	---	---	---	---	---	---	---	2	---	2	---	1	1	1	1	---	---	---	---	---	---
Suicide by Cutting or Piercing Instruments.....	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---
Suicide by Jumping.....	2	---	---	---	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	---
TOTAL ACCIDENTS.....	99	4	4	3	2	3	16	18	3	3	3	4	6	3	4	2	6	6	1	3	6	7	2	4	2
Poisoning by Food.....	2	---	---	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---
Other Acute Poisonings.....	3	---	---	---	---	---	---	---	---	---	---	1	1	---	---	---	1	---	---	---	---	---	---	---	---
Conflagration.....	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---
Burns.....	20	1	2	3	1	3	10	5	---	---	1	---	1	---	---	---	1	---	1	---	---	---	---	1	---
Absorption of Gases.....	19	2	---	---	---	---	2	1	---	---	---	---	1	---	---	---	---	3	---	1	1	1	---	---	---
Fall.....	17	1	1	---	---	---	2	---	---	1	1	1	1	1	2	---	2	---	---	3	3	1	---	---	---
Machines, Crushing (Vehicles), etc.....	2	---	---	---	---	---	---	1	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Street Car.....	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1	---	---	---
Automobile.....	32	---	---	1	---	---	1	10	3	2	1	1	2	2	1	1	1	2	1	---	1	2	---	1	---
Other Vehicles.....	1	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---
Effects of Heat.....	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	---	---	1	---
Fractures (cause not specified).....	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	1	1	2
Other External Violence.....	1	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL HOMICIDES.....	6	---	---	---	---	---	---	---	---	---	---	2	---	1	3	---	---	---	---	---	---	---	---	---	---
Homicides by Firearms.....	5	---	---	---	---	---	---	---	---	---	---	2	---	---	3	---	---	---	---	---	---	---	---	---	---
Homicides by Other Means.....	1	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---
XIII. ILL-DEFINED DISEASES--Total.....	6	---	---	---	---	1	1	1	1	---	1	---	---	---	---	---	1	---	---	1	---	---	---	---	---
Not Specified or Ill-Defined.....	6	---	---	---	---	1	1	1	1	---	1	---	---	---	---	---	1	---	---	1	---	---	---	---	---

## FINANCIAL REPORTING

Dr. Charles V. Crutcher, Health Officer



